

ARRANGEMENTS AND PROCEDURES  
AGREED BETWEEN  
THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND  
THE GOVERNMENT OF INDIA  
PURSUANT TO ARTICLE 6(iii) OF THEIR  
AGREEMENT FOR COOPERATION  
CONCERNING PEACEFUL USES OF NUCLEAR ENERGY

The Government of the United States of America and the Government of India (hereinafter “the Parties”), pursuant to the Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy, with Agreed Minute, signed at Washington, on October 10, 2008 (“the Agreement for Cooperation”), which entered into force on December 6, 2008,

CONSIDERING the commitment to full civil nuclear cooperation between the two countries in the peaceful uses of nuclear energy as noted in Article 6 of the Agreement for Cooperation;

NOTING that cooperation under the Agreement for Cooperation is between two States possessing advanced nuclear technology, both Parties having the same benefits and advantages, both committed to preventing WMD proliferation;

DESIRING to implement the provisions of Article 6(iii) of the Agreement for Cooperation concerning arrangements and procedures for the reprocessing or other alteration in form or content of nuclear material transferred pursuant to the Agreement for Cooperation and nuclear material and by-product material used in or produced through the use of nuclear material, non-nuclear material, or equipment so transferred;

NOTING that the “Agreement between the Government of India and the International Atomic Energy Agency for the Application of Safeguards to Civilian Nuclear Facilities” (INFCIRC/754)(“India-Specific Safeguards Agreement”), which provides for safeguards on reprocessing plants, entered into force on May 11, 2009;

Have agreed on the following arrangements and procedures under which such reprocessing or other alteration in form or content may take place in India at two new national reprocessing facilities dedicated to reprocessing safeguarded nuclear material under International Atomic Energy Agency (“IAEA”) safeguards, including future expansion, modifications, renovations or additions thereto;

## ARTICLE 1 - NOTIFICATION AND EFFECTIVENESS OF RIGHT TO REPROCESS

1. The Government of India shall notify the Government of the United States of America in writing that it has established a facility (“the Facility”). The notification shall contain:
  - a. the name of the owner or operator of the Facility;
  - b. the name, type and location of the Facility and its planned capacity;
  - c. confirmation that pursuant to Paragraph 14(a) of the India-Specific Safeguards Agreement, as referenced in Article 10(2) of the Agreement for Cooperation, India has notified the Facility to the IAEA for application of IAEA safeguards and that relevant safeguards arrangements have been agreed pursuant to the India-Specific Safeguards Agreement with the IAEA;
  - d. such information as is available to the Government of India on the IAEA safeguards approach that is not classified as “Safeguards Confidential”; and
  - e. a confirmation that physical protection measures as required by Article 8 of the Agreement for Cooperation will be applied at the Facility.

Both Parties confirm that the provisions of this Article or any subsequent Article of these Arrangements and Procedures shall not be used to secure any proprietary or commercially sensitive information about the Facility.

2. The Government of the United States of America shall provide an acknowledgement to the Government of India no later than thirty days after receipt of the notification. This acknowledgement shall be limited to a statement that the notification has been received.
3. It is understood that the phrase “the Facility” throughout these Arrangements and Procedures is intended to refer to two new national reprocessing facilities established by the Government of India to reprocess US-obligated nuclear material and any other safeguarded nuclear material and dedicated to the reprocessing and, as required, other alteration in form or content of safeguarded nuclear material under IAEA safeguards, as well as any additional new national facilities established and agreed to in accordance with paragraph 4 of this Article.
4. The Government of the United States of America and the Government of India understand the need for sufficient indigenous Indian capacity to reprocess or otherwise alter in form or content, under IAEA safeguards, U.S.-obligated nuclear

material subject to the Agreement for Cooperation. Based on this understanding, the Parties agree to pursue the steps necessary, consistent with their national laws, to permit reprocessing or alteration in form or content of nuclear material subject to the Agreement for Cooperation at one or more new additional national facilities in India, (beyond the two facilities provided for in these Arrangements and Procedures) established by the Government of India and dedicated to the reprocessing and, as required, other alteration in form or content of safeguarded nuclear material under IAEA safeguards. These Arrangements and Procedures shall apply to such facilities upon successful completion of these steps, unless otherwise agreed by the Parties.

## ARTICLE 2 - IAEA SAFEGUARDS

1. Consistent with the provisions of the Agreement for Cooperation, the Government of India shall offer the Facility for the application of IAEA safeguards as per the provisions of the India-Specific Safeguards Agreement. For the timely detection of withdrawal of safeguarded nuclear material from civilian use, safeguards measures shall include, as specified by the India-Specific Safeguards Agreement, nuclear material accountancy, design review, verification, progress in construction, appropriate containment and surveillance systems, process monitoring and other measures as may be agreed with the IAEA.
2. The Government of India shall ensure that the following minimum requirements, consistent with paragraph 37 of the India-Specific Safeguards Agreement, for the implementation of IAEA safeguards at the Facility are fulfilled:
  - a. Facility Design
    - i. *Early Provision of Design Information.*

The operator of the Facility shall co-operate with the IAEA by providing design information at the earliest possible time as provided in Paragraph 40 of the India-Specific Safeguards Agreement.
    - ii. *Effective Design Review.*

India and the operator of the Facility, as appropriate, shall cooperate with the IAEA in allowing “design information verification” (DIV) activities.
    - iii. *Incorporation of Design Features that Facilitate Safeguards.*

As may be required by the IAEA, facility design and operational characteristics shall enable effective and efficient implementation

of safeguards while precluding design features that would prevent the effective application of safeguards. Examples include, but are not limited to: installation of vessel calibration systems; effective methods of solution mixing and sampling; and installation of independent instruments as dictated by authentication concerns.

b. Safeguards System Design and Installation

i. *Cooperation with the IAEA.*

The Facility operator and the Safeguards Implementing Agency of the Government of India (hereinafter referred to as the Indian SIA) shall accommodate the installation and operation of IAEA instrumentation in the Facility, including data collection, authentication systems and tamper-indicating devices.

ii. *System of Accounting and Control Capable of Providing Accurate, Timely Data.*

The operator of the Facility and the Indian SIA shall maintain a comprehensive and accurate nuclear materials accountancy system that conforms to IAEA standards as per the provisions of the India-Specific Safeguards Agreement, so that reliable and timely declarations can be made to the IAEA. A system of inventory records and reports shall be maintained for each material balance area. An effective system for measurement control shall be utilized.

iii. *In-Process Material Measurement.*

The Facility operator and the Indian SIA shall cooperate with the IAEA to enable the IAEA to provide at the Facility measurement capabilities that the IAEA considers as necessary to cover all major in-process nuclear material inventories during plant operation.

iv. *Process Monitoring Data.*

If desired by the IAEA, the Facility operator shall provide to the IAEA access to safeguards relevant operator data, such as authenticated process control data as per the provisions of the India-Specific Safeguards Agreement and India's Additional Protocol when in force.

v. *On-site Laboratory.*

The Facility design shall incorporate an on-site laboratory, if IAEA so requests, to perform destructive analysis of process samples required by the IAEA safeguards approach at the Facility, and the IAEA shall be permitted to set up and operate that laboratory.

vi. *Containment and Surveillance Systems.*

The Facility design shall take into account the use of containment and surveillance systems in accordance with the IAEA's practices and procedures, as required for the effective implementation of safeguards, and the IAEA shall be permitted to maintain such systems at the Facility.

c. Safeguards Implementation

i. *Verification of Accountancy of Records.*

The IAEA shall be permitted to carry out regular verification of nuclear material accountancy records and reports.

ii. *Remote Data Transmissions.*

The IAEA, if it considers it efficient for the purpose of safeguards implementation, may use remote transmission, in accordance with the provisions of India's Additional Protocol when in force, of authenticated data to enable more frequent data analysis.

iii. *Data Authentication.*

The Parties recognize the importance of reliable instrumentation for the purpose of timely and accurate safeguards related data, and of data authentication for safeguards implementation. The Facility operator shall cooperate with the IAEA to apply adequate authentication methods to data and samples collected for safeguards purposes.

iv. *Access and Transparency.*

The Facility operator and the Indian SIA shall provide sufficient access to IAEA Inspectors to install and maintain safeguards equipment, and to inspect the complete process activity of the operator (including sample-taking) to the extent required for safeguards implementation and maintain a complete understanding of plant operation.

v. *Annual Cleanout Inventory.*

Nuclear material shall be removed from process lines annually in order to make it available, to the extent practicable, for accurate physical inventory verification.

vi. *Anomaly Resolution.*

The operator of the Facility and the Indian SIA shall cooperate with IAEA inspectors to resolve anomalies, if any, including material accounting anomalies, in a timely fashion.

### ARTICLE 3 - CONSULTATION

The Parties undertake to consult at the request of either Party regarding the implementation of these Arrangements and Procedures.

### ARTICLE 4 – PHYSICAL PROTECTION AND STORAGE AT THE FACILITY

1. In implementing physical protection at the Facility, and to the spent fuel and separated special fissionable material at the Facility, the Government of India shall apply measures in accordance with (i) levels of physical protection at least equivalent to the recommendations published in the IAEA document INFCIRC/225 Rev. 4 entitled “The Physical Protection of Nuclear Material and Nuclear Facilities,” and in any subsequent revisions of the document agreed to by the Parties, and (ii) the provisions of the 1980 Convention on the Physical Protection of Nuclear Material and any amendments to the Convention that enter into force for both Parties.
2. The Parties agree to exchange information on the approach to implementation of the requirements of this Article. The Parties shall also hold consultations visits at the Facility with respect to U.S.-obligated nuclear material in accordance with paragraph 1 of the Agreed Minute.
3. Any information provided by the Government of India pursuant to this Article that is classified shall be protected in accordance with Article 8 of these Arrangements and Procedures.

### ARTICLE 5 - ENVIRONMENTAL PROTECTION

The Government of India shall follow best practices, as established in its national regulations, for minimizing the impact on the environment which may arise from the operation of the Facility.

## ARTICLE 6 - MANAGEMENT OF SAFEGUARDED SEPARATED PLUTONIUM

India is committed to the management of separated safeguarded plutonium in ways that are consistent with its national decisions on the civil nuclear fuel cycle. The management of separated safeguarded plutonium subject to these Arrangements and Procedures by the Government of India shall take into account the need to avoid contributing to the risks of nuclear proliferation; the need to protect the environment, workers and the public; the potential of the material for further energy generation; and the importance of balancing supply and demand, including demand for reasonable working stocks for civil nuclear operations.

## ARTICLE 7 - SUSPENSION OF ARRANGEMENTS AND PROCEDURES

1. The Parties note the significance of the full and continued implementation of these Arrangements and Procedures concluded pursuant to Article 6(iii) of the Agreement for Cooperation for implementing full civil nuclear cooperation as envisioned in the Joint Statement of the Parties of July 18, 2005. The Parties recognize that these Arrangements and Procedures should facilitate and ensure the development of further cooperation in the field of peaceful uses of nuclear energy on a stable, reliable and predictable basis. The Parties have also agreed to take into account the effects of suspension of these Arrangements and Procedures on other aspects of cooperation under the Agreement for Cooperation.
2. The Government of India may undertake a temporary pause of limited duration in operations at the Facility if in its view such an action is required on account of specific circumstances regarding the Facility which may have an impact on the safe and secure operation of the Facility, the continued application of IAEA safeguards or physical protection measures, or the safety of personnel working in it or of the population in surrounding areas. The Government of India has the right to resume operations at the Facility when it decides that the specific circumstances that led to the temporary pause in operations no longer exist.
3. The Parties agree that the sole grounds for seeking suspension, under Article 14(9) of the Agreement for Cooperation, are exceptional circumstances limited to:
  - i) Either Party's determination that continuance of reprocessing of U.S. obligated nuclear material at the Facility would result in a serious threat to that Party's national security, consistent with the Agreed Minute to these Arrangements and Procedures, or serious threat to the physical protection of the Facility or of the nuclear material at the Facility, and
  - ii) Either Party's determination that suspension is an unavoidable measure.

4. Recognizing the critical importance of a decision to seek suspension, such a decision shall only be taken at the highest level of Government. As provided in Article 14(9) of the Agreement for Cooperation, the Party seeking suspension shall take into account the effects of such suspension on other aspects of cooperation under the Agreement for Cooperation. The Party seeking suspension shall also consider the effects of such suspension in light of the commitments and objectives, including full civil nuclear cooperation, contained in the U.S.-India Joint Statement of July 18, 2005.

5. The two Parties recognize that any suspension of these Arrangements and Procedures would have profound implications for the Agreement for Cooperation and for their relations. As such the two Parties shall exercise due restraint and caution before seeking suspension of these Arrangements and Procedures and shall use the provisions for consultations provided in Article 13 of the Agreement for Cooperation and in this Article. Such consultations shall also give special consideration to the importance for India of uninterrupted operation of nuclear reactors that provide nuclear energy for peaceful purposes and potential loss to the Indian economy and impact on energy security caused by a suspension of these Arrangements and Procedures. Both Parties shall take into account any negative consequences of such suspension on cooperation under the Agreement for Cooperation, including on-going contracts and projects initiated under the Agreement of Cooperation.

6. Subsequent to the above consultations, if either Party determines that exceptional circumstances do exist and that these Arrangements and Procedures should be suspended pursuant to Article 14(9) of the Agreement for Cooperation, that Party shall notify the other Party in writing providing reasons for the suspension. The Parties confirm that, as of the time of entry into force of these Arrangements and Procedures, there exists no objective evidence of any of the concerns specified in paragraph 3 of this Article.

7. Any decision to invoke the provisions of Article 14(9) of the Agreement for Cooperation shall be applied to the relevant reprocessing facility related to the exceptional circumstances to the minimum extent and for the minimum period of time necessary to deal with the exceptional circumstances and for not longer than a three month period unless extended by the Party seeking suspension for specific reasons conveyed in writing to the other Party. Both Parties shall review at the highest levels of Government, within three months from the commencement of the suspension, measures taken by the Parties aimed at reaching mutually acceptable resolution of outstanding issues, and steps taken to promote the earliest possible revocation of suspension, taking into account the effects of continuation of suspension on other aspects of cooperation under the Agreement for Cooperation. In case the suspension extends beyond a period of six months, both Parties shall enter into consultations on compensation for the adverse impact on the Indian economy due to disruption in electricity generation and loss on account of disruption of contractual obligations. The suspending Party shall notify the other Party in writing of a decision to end the suspension.



8. In the event of suspension of these Arrangements and Procedures the rights and obligations of the Parties under Article 14 of the Agreement for Cooperation shall remain unaffected.

ARTICLE 8 – CONFIDENTIALITY

1. If the Government of India, in carrying out its obligations under Articles 1(1)(e) and 4 of these Arrangements and Procedures, provides to the Government of the United States of America classified information concerning the physical protection of the Facility or nuclear material at the Facility, the Government of the United States of America shall protect that classified information against unauthorized disclosure in accordance with the terms set forth below and in accordance with the laws and regulations of the Government of the United States of America.
2. For purposes of these Arrangements and Procedures, “classified information” shall mean information provided by the Government of India pursuant to Articles 1(1)(e) and 4: (i) concerning the physical protection of the Facility or nuclear material at the Facility, the unauthorized disclosure of which could jeopardize the physical protection of the Facility or the material; (ii) which requires protection against unauthorized disclosure in the security interest of the Government of India; and (iii) which bears a security classification assigned by the Government of India. Classified information provided by the Government of India to the Government of the United States of America under these Arrangements and Procedures shall be marked by the Government of India in English as RESTRICTED, CONFIDENTIAL or SECRET.
3. Equivalent classifications are as follows:

<u>INDIA</u>	<u>UNITED STATES OF AMERICA</u>
SECRET	SECRET
CONFIDENTIAL	CONFIDENTIAL
RESTRICTED	CONFIDENTIAL (modified handling authorized)
4. To the extent consistent with its applicable national law and regulations, the Government of the United States of America shall seek to ensure that all classified information that is provided to the Government of the United States of America by the Government of India under these Arrangements and Procedures will not be publicly disclosed, and shall seek to accord appropriate protections to such classified information, with a view to providing the same level of protection as is

accorded to such classified information by the Government of India. The Parties shall consult regarding the appropriate protection of such classified information.

#### ARTICLE 9 – INTERPRETATION

1. These Arrangements and Procedures are not intended to and shall not be interpreted to affect the terms of the Agreement for Cooperation, and in the case of any conflict between these Arrangements and Procedures and the Agreement for Cooperation, the terms of the Agreement for Cooperation shall prevail.
2. Terms used in these Arrangements and Procedures shall have the same meaning as given in the Agreement for Cooperation unless otherwise specified.

#### ARTICLE 10 - ENTRY INTO FORCE

These Arrangements and Procedures shall enter into force on the date on which the Parties exchange diplomatic notes informing each other that they have completed all applicable requirements for entry into force.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed these Arrangements and Procedures.

Done at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_, in duplicate.

FOR THE GOVERNMENT OF THE  
UNITED STATES OF AMERICA:

FOR THE GOVERNMENT  
OF INDIA:

### Agreed Minute:

During the negotiations of the Arrangements and Procedures agreed between the Government of the United States of America and the Government of India pursuant to Article 6(iii) of their Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy (“the Arrangements and Procedures”) signed today, the following understandings, which shall be an integral part of the Arrangements and Procedures, were reached.

#### I. PHYSICAL PROTECTION AND STORAGE AT THE FACILITY

- i) A consultations visit under Article 4.2 shall be held within six months of the initial commencement of operations at the Facility and thereafter once in every subsequent five year period. In special cases, consultations visits can also be undertaken by mutual agreement between the Parties.
- ii) The purpose of the consultations visits is to provide an opportunity for both parties to exchange views on the implementation of physical protection measures as specified in Article 4.1 as well as exchange of information on international best practices with respect to physical protection.
- iii) During the consultations visits the following activities shall be permitted:
  - a. Initial meeting between the visiting team of not more than ten persons and the designated authorities of the facility;
  - b. Observe the protected area perimeter and its access control points;
  - c. Visit to the central alarm station;
  - d. A pre-exit meeting between the visiting team and the designated authorities of the Facility to prepare and finalize a confidential joint report on the visit to the Facility.
- iv) The consultations visits shall be:
  - a. undertaken to the Facility at a time and duration mutually agreed by the Parties taking into account paragraph (i) above;
  - b. Addressed in accordance with Article 12.3 of the Agreement for Cooperation.
  - c. Conducted in a manner consistent with the national laws and safety and security regulations in force and without causing hindrance to smooth operations at the Facility. Access within the Facility shall be restricted as appropriate by the designated authorities of the Facility in order to protect sensitive locations and equipment at the Facility as well as sensitive information. The use of equipment by the visiting team shall not be permitted.

## II. Article 7: SUSPENSION OF ARRANGEMENTS AND PROCEDURES

The Parties, taking into account their relations of strategic partnership and the objectives and purposes of the Agreement for Cooperation, agree that with respect to implementation of Article 7:

- i) the reference to “serious national security concerns” shall not mean or be the basis for:
  - a. addressing differences between the Parties on the nature of peaceful nuclear activities of either party or activities covered by Article 2.4 of the Agreement for Cooperation;
  - b. addressing differences with regard to fuel cycle choices;
  - c. the purpose of securing commercial advantage; or
  - d. the purpose of delaying, hampering or hindering peaceful nuclear activities of the other Party.
- ii) Suspension of the Arrangements and Procedures means suspension of reprocessing of U.S.- obligated nuclear material at the Facility.
- iii) Suspension of operation of the Facility or part thereof by the Facility operator shall be in accordance with operating procedures so as not to jeopardize the safety, early resumption of operation of the Facility, and its continued operation in the future. Operations at the Facility with regard to non-U.S.- obligated nuclear material shall not be affected by suspension under Article 7. With respect to U.S.- obligated nuclear material, the principle of proportionality as included in the Agreed Minute of the Agreement for Cooperation shall apply.

FOR THE GOVERNMENT OF THE  
UNITED STATES OF AMERICA:

FOR THE GOVERNMENT  
OF INDIA: