# United States Department of State



Washington, D.C. 20520

JANT 6 2008

#### Dear Chairman Lantos:

I am writing in response to your letter of October 5, 2007, concerning Congressional review of the recently-initialed U.S.-India Agreement for peaceful nuclear cooperation (the "123" agreement).

The Department welcomes the opportunity to answer any questions that members of the Foreign Affairs Committee may have concerning the agreement. To that end, please find enclosed the Department's responses to the 45 Questions for the Record that you submitted with your letter.

Thank you for raising your concerns, as well as those of the other members of your committee, on this important issue. Thank you also for your personal interest in, and support of, the overall Civil Nuclear Cooperation Initiative. We look forward to working with you to secure passage of the 123 Agreement when it is submitted to Congress.

Sincerely,

Jeffrey T. Bergner
Assistant Secretary

Legislative Affairs

Enclosure

As stated.

The Honorable

Tom Lantos, Chairman,
Committee on Foreign Affairs,
House of Representatives.

# Questions for the Record submitted to Assistant Secretary Bergner by Chairman Tom Lantos House Committee on Foreign Affairs October 5, 2007

#### **Question 1:**

What is the Administration's expectation regarding the likely economic benefits of this partnership, including India's purchase of U.S. nuclear fuel, reactors, and technology?

#### Answer:

We are confident that this initiative will yield important economic benefits to the private sector in the United States. India currently has 15 operating thermal power reactors with seven under construction, but it intends to increase this number significantly. Meeting this ramp-up in demand for civil nuclear reactors, technology, fuel, and support services holds the promise of opening new markets for the United States. Indian officials indicate they plan to import at least eight 1000-megawatt power reactors by 2012, as well as additional reactors in the years ahead. Studies suggest that if American vendors win just two of these reactor contracts, it could add 3,000-5,000 new direct jobs and 10,000-15,000 indirect jobs in the United States. The Indian government has conveyed to us its commitment to enable full U.S. participation in India's civil nuclear growth and modernization. At least 15 nuclear-related U.S. firms, including General Electric and Westinghouse, participated in a business delegation led by the Commerce Department in December 2006.

In addition, participation in India's market will help make the American nuclear power industry globally competitive, thereby benefiting our own domestic nuclear power sector. This initiative will permit U.S. companies to enter the lucrative and growing Indian market – something they are currently prohibited from doing. In addition, access to Indian nuclear infrastructure will allow U.S. companies to build reactors more competitively here and in the rest of the world – not just India.

# **Question 2**:

What scientific and technical benefits does the U.S. expect as a result of this agreement?

#### Answer:

A successfully implemented civil nuclear cooperation initiative with India will allow scientists from both our nations to work together in making nuclear energy safer, less expensive, more proliferation-resistant, and more efficient. Newly forged partnerships in this area may also facilitate scientific advancement in the many facets of nuclear energy technology. Indian involvement in international fora such as the International Thermonuclear Experimental Reactor and the Generation-IV Forum can expand the potential for innovation in the future of nuclear energy, as well as the stake of emerging countries in developing cheaper sources of energy.

In addition, we could choose to allow India to participate in the future in the Department of Energy's Global Nuclear Energy Partnership and collaborate with other countries with advanced nuclear technology in developing new proliferation-resistant nuclear technology. Such interaction could only be contemplated subsequent to the completion of the civil nuclear cooperation initiative.

# **Question 3**:

Does the Administration believe that the nuclear cooperation agreement with India overrides the Hyde Act regarding any apparent conflicts, discrepancies, or inconsistencies? Does this include provisions in the Hyde Act which do not appear in the nuclear cooperation agreement?

## Answer:

In his September 19 statement, Assistant Secretary Boucher twice made clear that "we think [the proposed 123 Agreement with India] is in full conformity with the Hyde Act." Indeed, the Administration is confident that the proposed agreement is consistent with the legal requirements of both the Hyde Act and the Atomic Energy Act. The proposed agreement satisfies the particular requirements of Section 123 of the Atomic Energy Act with the exception of the requirement for full-scope safeguards, which the President

is expected to exempt prior to the submission of the agreement to Congress for its approval, as provided for in section 104 of the Hyde Act. The agreement is also fully consistent with the legal requirements of the Hyde Act.

### **Question 4**:

Why are dual-use items for use in sensitive nuclear facilities mentioned in the proposed U.S.-Indian nuclear cooperation agreement, when such items are not transferred pursuant to an agreement for cooperation?

## Answer:

The Agreement provides for such transfers, consistent with the "full" cooperation envisaged by the July 18, 2005 Joint Statement. Article 5(2) of the 123 Agreement provides for such transfers by the Parties, however, only "subject to their respective applicable laws, regulations and license policies." It is not unusual for U.S. agreements for peaceful nuclear cooperation to provide for transfers of items that would in fact be transferred outside the agreement, if they are to be transferred at all. For example, many U.S. agreements, including the proposed U.S.-India Agreement, cover transfers of "components" and "information," even though such transfers would normally take place outside the agreement. Most importantly, it should be noted that while the proposed U.S.-India Agreement provides for transfer of the items in question, as a framework agreement it does not compel any such transfers, and as a matter of policy the United States does not transfer dualuse items for use in sensitive nuclear facilities.

# **Question 5**:

Is it the intention of the U.S. government to assist India in the design, construction, or operation of sensitive nuclear technologies through the transfer of dual-use items outside the agreement? If so, how is this consistent with long-standing U.S. policy to discourage the spread of sensitive nuclear technology and with Section 103(a)(5) of the Hyde Act? Has the U.S. transferred such dual-use items to sensitive nuclear facilities in other cooperating parties and, if so, to which countries?

Consistent with standing U.S. policy, the U.S. government will not assist India in the design, construction, or operation of sensitive nuclear technologies through the transfer of dual-use items, whether under the Agreement or outside the Agreement. The United States rarely transfers dual-use items for sensitive nuclear activities to any cooperating party and no such transfers are currently pending.

### **Question 6:**

Does the Administration have any plan or intention to negotiate an amendment to the proposed U.S.-India agreement to transfer to India sensitive nuclear facilities or critical components of such facilities? If so, how would such transfers be consistent with the above-cited provision of the Hyde Act and the long-standing U.S. policy to discourage the spread of such technologies?

#### Answer:

The Administration does not plan to negotiate an amendment to the proposed U.S.-India Agreement to transfer to India sensitive nuclear facilities or critical components of such facilities.

# Question 7:

Is it the intention of the Administration to transfer or allow the transfer of sensitive nuclear technology outside of the U.S.-India nuclear cooperation agreement? If so, how would such transfers be consistent with the Hyde Act and the long-standing U.S. policy to discourage the spread of such technologies?

# Answer:

Although the Hyde Act allows for transfers of sensitive nuclear technology under certain circumstances, it is not the intention of the Administration to transfer or allow the transfer of sensitive nuclear technology to India outside the U.S.-India Agreement for peaceful nuclear cooperation.

#### **Question 8:**

What is the State Department's position regarding the manner by which an amendment to the proposed U.S.-India nuclear cooperation agreement would be submitted to the Congress? Because it would be an amendment to an exempted agreement, does the Administration agree that it would require a Joint Resolution of Approval before entering into force?

### Answer:

We would look at any future amendment on a case-by-case basis. Regarding the specific example discussed in the question, the Administration has no plan or intention to negotiate an amendment to the proposed U.S.-India agreement to transfer to India sensitive nuclear facilities or critical components of such facilities.

### Question 9:

Would the U.S. limit any transfer of dual-use technology to India's enrichment and reprocessing facilities to those that were participants in a bilateral or multinational program to develop proliferation-resistant fuel cycle technologies?

## Answer:

As previously stated, it is not the intention of the U.S. government to assist India in the design, construction, or operation of sensitive nuclear technologies through the transfer of dual-use items, whether under the Agreement or outside the Agreement. India does not have any facilities that participate in a bilateral or multinational program to develop proliferation-resistant fuel cycle technologies. If India were to develop such facilities, potential dual-use transfers could be considered only under the exceptions granted in the Hyde Act.

# Question 10:

Why does Paragraph 4 of Article 10 of the U.S.-India agreement rely on an IAEA decision regarding the impossibility of applying safeguards rather than either party's judgment that the Agency is not or will not be applying safeguards? Would this permit a situation to arise in which there were a period of time during which

safeguards might not be applied but the IAEA had not reached a conclusion that the application of safeguards was no longer possible?

#### Answer:

Paragraph 4 of Article 10 addresses one situation – the same situation as is addressed in paragraph 4(a) of the Nuclear Suppliers Group Guidelines – in which fall-back safeguards would be required because the International Atomic Energy Agency has decided that the application of Agency safeguards is no longer possible. It does not, however, constitute the fundamental basis provided by the Agreement for the application, if needed, of fall-back safeguards. That basis is provided by Paragraph 1 of Article 10, which states categorically that "[s]afeguards will be maintained with respect to all nuclear materials and equipment transferred pursuant to this Agreement, and with respect to all special fissionable material used in or produced through the use of such nuclear materials and equipment, so long as the material or equipment remains under the jurisdiction or control of the cooperating Party."

This guarantee follows the formula prescribed by section 123(a)(1) of the U.S. Atomic Energy Act of 1954, as amended. Taken together with paragraph 3 of Article 16 of the Agreement, it provides that safeguards in some form – International Atomic Energy Agency or other – must *always* be maintained with respect to all nuclear items in India subject to the Agreement so long as they remain under the jurisdiction or control of India, irrespective of the duration of other provisions in the Agreement or whether the Agreement is terminated or suspended for any reason, precisely as section 123(a)(1) of the Atomic Energy Act requires.

Regarding the second part of the question, for the reasons just given, Paragraph 1 of Article 10 precludes there arising such a situation.

# **Question 11**:

Why does the provision not call for rectifying measures, as in the Japan agreement? Why does it not call for the parties to immediately enter into arrangements which conform to safeguards principles and procedures of the Agency?

Different approaches to fall-back safeguards are possible, consistent with the requirement of section 123(a)(1) of the Atomic Energy Act. If for some reason International Atomic Energy Agency safeguards fail to be applied to nuclear items in India subject to the U.S.-India Agreement, the Parties of necessity must enter into arrangements for alternative measures to fulfill the requirement of paragraph 1 of Article 10.

### **Question 12**:

Have "appropriate verification measures" been discussed, defined, or otherwise outlined with Indian officials? If Indian officials have shared their views on appropriate verification measures, what are those views? Do U.S. and Indian views diverge and if so, how?

#### Answer:

The United States has not discussed in detail with India what form "appropriate verification measures" might take if the International Atomic Energy Agency decides that it is no longer possible for it to apply safeguards as provided for by paragraph 2 of Article 10 of the U.S.-India Agreement. The United States has expressed its view to India that acceptable alternative measures in that case might range from an alternative safeguards arrangement with the International Atomic Energy Agency, to some other form of international verification. The Government of India has expressed its view that for purposes of implementing the U.S.-India Agreement, Agency safeguards can and should be regarded as being "in perpetuity." At the same time it fully appreciates that paragraph 1 of Article 10 of the Agreement does not limit the safeguards required by the Agreement to Agency safeguards.

# **Question 13**:

In the U.S. view, how would potential appropriate verification measures provide effectiveness and coverage equivalent to that intended to be provided by safeguards in paragraph 1 of Article 10?

The "appropriate verification measures" referred to in paragraph 4 of Article 10 would be an alternative to International Atomic Energy Agency safeguards applied pursuant to the India-Agency safeguards agreement referenced in *paragraph 2* of Article 10, the implementation of which in the normal course of events would satisfy the safeguards requirement of paragraph 1 of Article 10 with respect to India. If it were no longer possible for the Agency to apply safeguards to nuclear items subject to the U.S.-India Agreement in India, alternative verification measures agreed by the Parties would need to be carried out on some other international basis to maintain continuity of safeguards as required by paragraph 1 of Article 10. The United States would expect such measures to provide effectiveness and coverage equivalent to that intended to be provided by the India-Agency safeguards agreement referenced in paragraph 2 of Article 10, albeit without a necessary role for the International Atomic Energy Agency in their application.

### **Question 14**:

Which of the commitments that the United States made in Article 5 are of a binding legal character? Does the Indian Government agree?

## Answer:

The question quotes paragraph 6 of article 5, which contains certain fuel supply assurances that were repeated verbatim from the March 2006 separation plan. These are important Presidential commitments that the U.S. intends to uphold, consistent with U.S. law.

## **Question 15**:

What is the definition of "disruption of supply" as used in Article 5? Do the U.S. and Indian governments agree on this definition?

It is the understanding of the United States that the use of the phrase "disruption of fuel supplies" in Article 5.6 of the 123 Agreement is meant to refer to disruptions in supply to India that may result through no fault of its own. Examples of such a disruption include (but are not limited to): a trade war resulting in the cut-off of supply; market disruptions in the global supply of fuel; and the potential failure of an American company to fulfill any fuel supply contracts it may have signed with India. We believe the Indian government shares our understanding of this provision.

#### **Question 16:**

Would any of these commitments continue to apply if India detonated a nuclear explosive device? If so, under what circumstances?

#### Answer:

As outlined in Article 14 of the 123 Agreement, should India detonate a nuclear explosive device, the United States has the right to cease all nuclear cooperation with India immediately, including the supply of fuel, as well as to request the return of any items transferred from the United States, including fresh fuel. In addition, the United States has the right to terminate the agreement on one year's written notice. (Notice of termination has to precede cessation of cooperation pursuant to Article 14). In case of termination, the commitments in Article 5.6 would no longer apply.

# **Question 17**:

Do the assurances in Article 5 require the United States to assist India in finding foreign sources of nuclear fuel in the event that the United States ceases nuclear cooperation with India?

## Answer:

Ceasing nuclear cooperation with India would be a serious step. The United States would not take such a serious step without careful consideration of the circumstances necessitating such action and the effects and impacts it would entail. Such circumstances would include, for example, detonation of a nuclear weapon, material violation of the 123 Agreement, or termination,

abrogation, or material violation of International Atomic Energy Agency safeguards. The provisions in article 14 on termination of the agreement and cessation of cooperation would be available in such circumstances, and their exercise would render article 5.6 inapplicable. Moreover, such circumstances would likely be inconsistent with the political underpinnings of the U.S.-India Initiative upon which the commitments in article 5.6 were based.

## **Question 18:**

How is this fuel supply assurance consistent with Section 103(a)(6) of the Hyde Act which states that it is U.S. policy to: "Seek to prevent the transfer to any country of nuclear equipment, materials, or technology from other participating governments in the Nuclear Suppliers Group or from any other source if nuclear transfers to that country are suspended or terminated pursuant to this title, the Atomic Energy Act, or any other United States law"?

#### Answer:

There is no inconsistency between the fuel supply assurances contained in Article 5 of the U.S.-India Agreement and section 103(a)(6) of the Hyde Act. Paragraph 6 of Article 5 of the U.S.-India Agreement records assurances given by the United States to India in March 2006. In particular, the United States conveyed its commitment "...to work with friends and allies to adjust the practices of the Nuclear Suppliers Group to create the necessary conditions for India to obtain full access to the international fuel market, including reliable, uninterrupted and continual access to fuel supplies from firms in several nations," and "[i]f despite these arrangements a disruption of fuel supplies to India occurs, the United States and India would jointly convene a group of friendly countries ... to pursue such measures as would restore fuel supply to India."

These fuel supply assurances are intended to guard against disruptions of fuel supply to India that might occur through no fault of India's own. Instances of such a disruption might include, for example, a trade war resulting in the cut-off of supply, market disruptions in the global supply of fuel, or the failure of a company to fulfill a fuel supply contract it may have signed with India. In such circumstances the United States would be prepared to encourage transfers of nuclear fuel to India by other Nuclear Suppliers Group members.

The fuel supply assurances are not, however, meant to insulate India against the consequences of a nuclear explosive test or a violation of nonproliferation commitments. The language of Article 5.6(b), particularly in the context of Article 14, does not provide for any such insulation.

### **Question 19**:

How are these provisions regarding a <u>life-time</u> strategic reserve for the operating life of India's safeguarded reactors consistent with subparagraph (10) of paragraph (a) of Section 103 of the Hyde Act, which states that: "Any nuclear power reactor fuel reserve provided to the Government of India for use in safeguarded civilian nuclear facilities should be commensurate with reasonable operating requirements?"

### Answer:

We do not read these provisions to be inconsistent. The parameters of the proposed "strategic reserve" and of India's capacity to acquire nuclear fuel for its reactors will be developed over time. Thus, it is premature to conclude that the strategic reserve will develop in a manner inconsistent with the Hyde Act.

## **Question 20:**

Do the U.S. and India agree on the definition of reasonable reactor operating requirements for Indian reactors? If yes, what is it? If not, how do they disagree? Does the U.S. have an assessment of how much nuclear material would be required for a life-time strategic reserve for each safeguarded Indian power reactor that could receive fuel pursuant to the proposed agreement?

## Answer:

The U.S.-India Agreement does not define "reasonable operating requirements," and the two governments have not discussed a definition. Any definition would have to take into account among other things the physical characteristics of the reactors, their expected operating cycles, their expected time in service, the likelihood of fuel supply disruptions over decades of operation, and many similar factors that are difficult to quantify in the abstract. We would expect that the actual amount of fuel put in the

reserve would depend not only on the factors just mentioned, but also on such factors as availability of fuel in the market, price, Indian storage capacity, costs of storage, and similar practical considerations. The Agreement itself establishes neither a minimum nor a maximum quantity of nuclear material to be placed in India's reserve.

#### **Question 21:**

How are these assurances consistent with subparagraph (6) of paragraph (a) of Section 103 of the Hyde Act which states that it is U.S. policy to: "Seek to prevent the transfer to a country of nuclear equipment, materials, or technology from other participating governments in the Nuclear Suppliers Group or from any other source if nuclear transfers to that country are suspended or terminated pursuant to this title, the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), or any other United States law"?

## Answer:

Please see the response to Question 18.

## **Question 22**:

What impact will these U.S. commitments of nuclear fuel supply to India have on the U.S. initiatives to discourage the spread of enrichment and reprocessing facilities?

## Answer:

We do not foresee any negative impact on these initiatives. India already possesses both types of facilities. We do not believe that the provision of fuel assurances to India will have any effect on our efforts to offer reliable access to nuclear fuel to persuade countries aspiring to develop civil nuclear energy to forgo enrichment and reprocessing capabilities of their own.

# **Question 23**:

Have the Indians explained to the U.S. or to the International Atomic Energy Agency their definition of the term "an India-specific safeguards agreement?" If so, what is it?

The Indian government has not yet explained to the United States what it means by the term "India-specific" safeguards agreement. The Indian government has been in discussions with the IAEA regarding its safeguards agreement. However, these discussions have not concluded. The United States remains confident that the safeguards agreement to be negotiated between India and the IAEA will address all of the concerns associated with the term "India-specific."

### **Question 24:**

Which provisions of INFCIRC/66/Rev.2 agreements provide for safeguards in perpetuity? Would these apply to civil nuclear reactors that a country such as India requests the IAEA to safeguard?

#### Answer:

INFCIRC/66/Rev.2 is not a "model agreement" as is INFCIRC/153 (the basis for NPT safeguards agreements) – INFCIRC/66-type agreements are not as rigidly determined as Nuclear Nonproliferation Treaty safeguards agreements. Because INFCIRC/66-type agreements do not involve full-scope safeguards (safeguards applied to all nuclear material in a state), but have been aimed at the application of safeguards to specific supplied materials or facilities, the scope of safeguards application is delineated uniquely in each agreement.

This is generally done through the mechanism of a dynamic list of inventory items to which the agreement stipulates that safeguards must be applied. The main part of the inventory list contains facilities and material that are permanently under safeguards. The subsidiary part of the inventory list contains facilities that are temporarily under safeguards due to the presence of safeguarded material. There is a third section of the list that contains nuclear material on which safeguards are suspended or exempted (e.g., because the material has been diluted to the point where it is no longer usable, has been transferred out of the state, etc.). We would expect that the Indian safeguards agreement will be based on this general structure, and that the nuclear facilities India declares to be "civil" will be placed in the main (permanent safeguards) part of the inventory list. Also in the main part of

the inventory would be nuclear material exported to India, and any nuclear material generated through the use of that material.

Consistent with International Atomic Energy Agency Board Document GOV/1621 (which is referenced in the Hyde Act, Sec. 104(b)2), the safeguards agreement should also contain language that ensures that: (1) the duration of the agreement is related to the period of actual use of the items in the recipient state; and (2) the rights and obligations with respect to safeguarded nuclear material shall apply until such time as the International Atomic Energy Agency terminates safeguards pursuant to the agreement (e.g. the material is no longer usable or has been transferred from the recipient state).

#### **Question 25:**

Has the Indian government provided U.S. officials with a definition of "corrective measures"? If so, what is it? Does it involve removing IAEA-safeguarded material from such safeguards in certain circumstances? If so, does the U.S. support the conclusion of an Indian agreement with the IAEA that provides for perpetuity of safeguards while at the same time making such perpetuity contingent on the invocation of "corrective measures?"

#### Answer:

The Indian government has not provided the United States with a definition of "corrective measures." Until a safeguards agreement is completed between India and the International Atomic Energy Agency and the issue of "corrective measures" is clarified, we cannot comment on the appropriateness of the agreement. However, we expect that the Indian government will implement in letter and in spirit its commitment to "safeguards in perpetuity," to which it agreed on March 2, 2006. As Secretary Rice stated during her testimony before the Senate Foreign Relations Committee on April 5, 2006, "We've been very clear with the Indians that the permanence of safeguards is the permanence of safeguards without condition."

# **Question 26**:

Since India is not a party to the Nuclear Nonproliferation Treaty (NPT) and does not accept full-scope safeguards, does this long-term consent for reprocessing for

India change U.S. policy for granting long-term consent to reprocessing and the use of plutonium? If so, what criteria will the U.S. now use to consider requests for reprocessing and the use of plutonium either on a case-by-case basis or for long-term advance programmatic arrangements?

#### Answer:

The consent to reprocessing is contingent upon the construction of a new, dedicated reprocessing facility that will be under International Atomic Energy Agency safeguards. The criteria applied by the United States in considering the Indian request were the same as those applied in the earlier instances (EURATOM and Japan). They are that (1) the reprocessing will not be inimical to the common defense and security, and (2) the reprocessing will not result in a significant increase in the risk of proliferation beyond that which exists at the time the approval is requested, giving foremost consideration to whether the reprocessing will take place under conditions that will ensure timely warning to the United States of any diversion well in advance of the time at which the diverted material could be transformed into a nuclear explosive device. These are the criteria for granting approval for reprocessing established by section 131 of the Atomic Energy Act.

Article 6(iii) of the Agreement provides that India and the United States must agree on "arrangements and procedures" under which the reprocessing will take place before India can physically reprocess any material subject to the Agreement. The Administration will ensure that the safeguards, physical protection and other measures to be set forth in the agreed "arrangements and procedures" will be both rigorous and consistent with the criteria described above.

## **Question 27**:

What special challenges will the International Atomic Energy Agency (IAEA) face in safeguarding a reprocessing plant in a non-NPT state that does not have full-scope safeguards?

# Answer:

Assuming that, consistent with the terms of the 123 Agreement, India builds a new reprocessing plant dedicated to the processing of material under International Atomic Energy Agency safeguards, there would be little, if

any, difference in the technical challenge of applying safeguards to such a facility as opposed to a comparable facility in a state with a comprehensive safeguards agreement. There are some differences under an INFCIRC/66 agreement in the state's record-keeping and material accounting reporting requirements, but these should not have an impact on safeguards effectiveness. The technical objectives and technical measures applied in the two cases would not differ in any significant way. In each case the International Atomic Energy Agency would seek to provide assurance that the declared material was not diverted, and that the facility was operated in the manner declared. The facility would be under uninterrupted safeguards, and the material entering, exiting, and resident in the facility would all be subject to safeguards. In the case of India, the Agency's safeguards conclusions would have to be limited to the civil facilities and materials under safeguards, and could not be extrapolated to apply to the nuclear program as a whole.

#### **Question 28:**

Will the U.S. insist that the safeguards agreement for the planned Indian reprocessing plant include all the safeguards procedures and approaches that the IAEA applies to the Rokkasho reprocessing facility in Japan, including state-of-the-art, near-real-time accountancy and containment and surveillance?

#### Answer:

U.S. policy is that safeguards should be applied to meet established technical standards of effectiveness, as efficiently as possible; that is the policy we pursue in the context of our bilateral agreements with other states such as Japan, and we would continue to pursue such a policy in discussions with India in connection with arrangements for reprocessing. The safeguards methods employed at the Rokkasho Reprocessing Plant are consistent with both International Atomic Energy Agency safeguards criteria, and with the results of a lengthy international cooperative effort to address the technical problems of safeguarding large reprocessing plants. We would expect the same approaches to apply to a new Indian reprocessing plant dedicated to processing safeguarded material. However, we cannot yet speculate that safeguards would be carried out in exactly the same manner, although containment, surveillance, and some sort of continuous material monitoring would certainly be involved. A new reprocessing plant may well be many years off, and safeguards technology constantly moves forward; by the time

a new Indian plant is in operation, there will almost certainly be a new generation of surveillance and radiation measurement devices available, and lessons learned from Rokkasho safeguards.

### **Question 29**:

Will the Administration submit any consent arrangements for Indian reprocessing to Congress as an amendment to the U.S.-India agreement for cooperation so that Congress will have a full 90 days to give adequate time to review its provisions? Or will the Administration submit these only as a subsequent arrangement under section 131 of the Atomic Energy Act, thereby allowing Congress only 15 days of continuous session for review of this complex issue?

#### Answer:

Section 131 of the Atomic Energy Act provides explicitly for review and execution of subsequent arrangements related to the reprocessing of U.S.-origin material. However, if proposed "arrangements and procedures" for reprocessing involved changes to provisions in the U.S.-India 123 Agreement, an amendment to the agreement would be required.

## Question 30:

Why are the programmatic consent arrangements that the U.S. is proposing to India, a non-NPT signatory, much less specific and rigorous than the procedures that the U.S. required of EURATOM and Japan?

## Answer:

The advance, long-term consent accorded to India in the U.S.-India Agreement by Article 6(iii) centers on a new Indian national reprocessing facility that has not yet been designed, let alone built. Many relevant nonproliferation considerations that could readily be dealt with in the texts of the U.S.-Japan and U.S.-Euratom agreements (or in related documents) could not be dealt with immediately in the U.S.-India Agreement.

Nevertheless, the U.S.-India Agreement establishes as fundamental criteria that a new national reprocessing facility must be *dedicated* to reprocessing safeguarded nuclear material under International Atomic Energy Agency safeguards, and that any special fissionable material (i.e., plutonium)

separated by the facility may only be utilized in national facilities under International Atomic Energy Agency safeguards. Further, it provides that the consent *does not become effective* until the United States and India consult and agree on arrangements and procedures under which activities at the new facility will take place.

Finally, Article 6(iii) provides that the arrangements and procedures must address nonproliferation considerations identical to those addressed in the procedures relating to the U.S.-Japan and U.S.-Euratom agreements (e.g. safeguards, physical protection, storage, environmental protection), as well as "such other provisions as may be agreed by the Parties." At the appropriate time the United States will consult with India for the purpose of agreeing on the requisite arrangements and procedures and will ensure that they are no less rigorous than those governing the U.S. consent arrangements with Japan and with EURATOM.

## **Question 31**:

Why are there no notification procedures for adding new Indian facilities to the list of facilities that may use plutonium derived from U.S.-supplied fuel?

#### Answer:

The procedures established by Article 7.1 of the U.S.-India Agreement whereby each Party records all facilities storing separated plutonium subject to the Agreement on a list and makes its list available to the other Party serve equally to notify to the other Party all facilities utilizing (or potentially utilizing) plutonium subject to the Agreement, since the plutonium-bearing fuel must first be located at the facility before it can be utilized. A similar approach is taken in the U.S.-EURATOM Agreement, where facilities formally notified as being added to a party's "Delineated Program" (Annex A) do not include utilization facilities; the latter are notified, as appropriate, when they are added to a "Storage" list as provided for by Article 8.3.

## **Question 32**:

Will the United States insist that any plutonium and uranium recovered from the reprocessing of U.S.-origin fuel at the proposed dedicated Indian reprocessing facility be subject to IAEA safeguards and peaceful, non-explosive use assurances in perpetuity, including any such material recycled in Indian reactors?

Yes. Article 9, Article 10, and Article 16 of the U.S.-India Agreement guarantee this coverage.

#### **Question 33:**

Will the U.S. insist that any uranium or plutonium used in or produced through the use of U.S.-supplied material be subject to safeguards in perpetuity if such material is used in India's breeder reactors?

#### Answer:

Yes. Article 10 of the U.S.-India Agreement guarantees this coverage.

#### **Question 34:**

If India decides at some point in the future to reprocess spent breeder reactor fuel that contains U.S.-origin material, how will the U.S. ensure that it is subject to all the non-proliferation conditions and controls in the proposed agreement, including safeguards and consent rights?

## Answer:

Article 10.6 of the U.S.-India Agreement provides that "[e]ach Party shall establish and maintain a system of accounting for and control of nuclear material transferred pursuant to this Agreement and nuclear material used in or produced through the use of any material, equipment, or components so transferred." Article 10.7 provides that "[u]pon the request of either Party, the other Party shall report or permit the IAEA to report to the requesting Party on the status of all inventories of material subject to this Agreement." Thus, the United States will be able to track all nuclear material in India subject to the Agreement, including at India's breeder reactors (which would have to be brought under International Atomic Energy Agency safeguards before U.S.-obligated nuclear material could be introduced to them), at India's new dedicated reprocessing facility (when built), and at any other Indian facility where U.S.-obligated plutonium may be located. In tracking this material the United States will be able to ensure that all conditions and

controls required by the Agreement, including International Atomic Energy Agency safeguards, are in fact being maintained.

### **Question 35**:

In light of these requirements of U.S. law, why doesn't the proposed U.S.-Indian peaceful nuclear cooperation agreement contain an explicit reference to the actions that would give the U.S. the right to terminate nuclear cooperation and to require the return of equipment and materials subject to the agreement, if India detonates a nuclear explosive device?

#### Answer:

Article 14 of the proposed U.S.-India agreement for cooperation provides for a clear right for the U.S. to terminate nuclear cooperation and a right to require the return of equipment and materials subject to the agreement in all of the circumstances required under the Atomic Energy Act, including if India detonated a nuclear explosive device or terminated or abrogated safeguards (per section 123(a)(4) of the Act). Thus, it fully satisfies the relevant requirements of the Act.

### **Question 36**:

Does the U.S. possess the right under Article 14, without any precondition or consent by India, to take back any and all U.S.-origin nuclear material or equipment provided to India pursuant to the nuclear cooperation agreement?

## Answer:

Under Article 14 of the proposed agreement, the U.S. would be able to exercise the right to require the return of material and equipment subject to the agreement after (1) giving written notice of termination of the agreement and (2) ceasing cooperation, based on a determination that "a mutually acceptable resolution of outstanding issues has not been possible or cannot be achieved through consultations." Thus, both of the actions that must be taken to exercise the right of return would be within the discretion of the U.S. Government, and both actions could be taken at once in the unlikely case that the U.S. believed that a resolution of the problem could not be achieved through consultations.

Article 14 does not require that the other party consent to the exercise of the right to terminate the agreement, the right to cease cooperation, or the right of return. Prior to the actual removal of items pursuant to the right of return, the parties would engage in consultations regarding, *inter alia*, the quantity of items to be returned, the amount of compensation due, and the methods and arrangements for removal. These consultations are a standard feature of right of return provisions and are included in all 123 agreements that the United States has signed with other cooperating parties.

#### **Question 37:**

Under what circumstances does the termination provision allow the United States to terminate cooperation with India? Does the U.S. have the unconditional right to cease cooperation immediately upon its determination that India has taken action that the U.S. believes constitutes grounds for termination of cooperation?

#### Answer:

Like all other U.S. agreements for nuclear cooperation, the proposed U.S.-India agreement is a framework agreement and does not compel any specific cooperation. Thus, a cessation of cooperation would not be inconsistent with the provisions of the agreement. Also, as in other agreements for cooperation, the proposed U.S.-India agreement provides specifically (in article 14) for a right to cease cooperation. Article 14 makes clear that the U.S. would have the right to cease cooperation immediately if it determined that India had taken actions that constituted grounds for such cessation and that a resolution of the problem created by India's actions could not be achieved through consultations. This is a reciprocal right that India enjoys as well. Article 14 does not elaborate the specific circumstances that might bring about such a formal cessation of cooperation. However, the provisions of article 14 underscore the expectation of both parties that termination of the agreement, cessation of cooperation, and exercise of the right of return would be serious measures not to be undertaken lightly.

# **Question 38**:

Could the U.S. terminate cooperation pursuant to Article 14 of the nuclear cooperation agreement for reasons other than India's detonation of a nuclear explosive device or abrogating or violating a nuclear safeguards agreement? Does the government of India agree?

As noted in the previous answer, Article 14 of the U.S.-India Agreement does not elaborate the specific circumstances that might trigger a cessation of cooperation pursuant to that article. As explained in the answer to question 17, the circumstances for possible termination would include, for example, detonation of a nuclear weapon, material violation of the 123 Agreement, or termination, abrogation, or material violation of a safeguards agreement. The provisions of Article 14 underscore the expectation of both parties that termination of the agreement, cessation of cooperation, and exercise of the right of return would be serious measures not to be undertaken lightly. We believe the language establishing these rights is clear and well understood by both countries.

### **Question 39**:

Do the nonproliferation assurances and conditions in the proposed new agreement apply to the nuclear materials and equipment that the U.S. supplied for the Tarapur reactors, as well as the spent fuel from those reactors? If not, why?

### Answer:

The proposed U.S.-India Agreement would not apply retroactively to the spent fuel from the Tarapur reactors. The Atomic Energy Act does not require such retroactive application, but it does impose certain conditions with respect to previously exported material before embarking on new cooperation (see section 127). The Administration believes it will be able to satisfy these requirements of the Atomic Energy Act.

# **Question 40**:

Does the U.S. continue to hold the position that India is legally obligated to adhere to the nonproliferation assurances and controls, including peaceful-use assurances, safeguards, consent to reprocessing and retransfer to their countries with respect to the nuclear equipment and materials that were subject to the expired 1963 agreement for cooperation? Does the Indian Government share the U.S. views?

#### Answer:

The U.S. and India have maintained differing legal positions on the question of residual conditions and controls on nuclear material subject to the 1963 agreement following expiration of the agreement in 1993. However, India has agreed with the International Atomic Energy Agency on the application of safeguards to nuclear material from the Tarapur reactors. Moreover, the material is subject to the INFCIRC/66 Agreement. And the U.S. is confident that there would be consultations between the U.S. and India before any change in the status of the nuclear material (e.g., reprocessing).

#### **Question 41:**

Will the Indian Government have any legal right to suspend or eliminate safeguards, reprocess U.S.-origin material, or otherwise take any action that would be prohibited under the proposed agreement after the termination by either party of the proposed?

#### Answer:

Article 16 of the proposed U.S.-India Agreement expressly provides for the survival of essential rights and conditions on items subject to the agreement even after termination or expiration of the agreement, including *inter alia* with respect to the application of safeguards (article 10), reprocessing consent (article 6), and peaceful use (article 9).

# **Question 42**:

Does the Administration agree with Prime Minister Singh that there will be no derogation of India's right to take corrective measure in the event of fuel supply interruption? Will any corrective measures that India might take involve any derogation of the U.S. nonproliferation assurances, rights, and controls that are set out in articles 5.6(c), 6, 7, 8, 9, and 10?

## Answer:

The language of article 16 clearly provides for the applicability of the referenced provisions to items subject to the proposed agreement even after termination or expiration of the agreement. Until India has completed its safeguards agreement with the International Atomic Energy Agency and the parameters of "corrective measures" are known, we will not be in a position to speak definitively to the potential effect on other provisions of the

proposed agreement. That said, it would not be consistent with the proposed agreement text for such corrective measures to detract from the applicability of the provisions referenced in article 16 to items subject to the proposed agreement, including after termination or expiration of the agreement.

#### **Question 43:**

What are the explicit linkages and interlocking rights and commitments that Prime Minister Singh was referring to? Do the U.S. and Indian governments agree on the definition of these linkages and interlocking rights and commitments? If not, how do they differ?

### Answer:

International agreements, by their nature, typically involve interlocking rights and commitments, and this is the case with our agreements for nuclear cooperation. The creation of a framework for nuclear cooperation is predicated on a set of rights and conditions that serve essential nonproliferation purposes. Beyond that, we can only say that the quoted statement is at a high level of generality, and we are not in a position to speak for the Indian government as to whether anything more specific was intended by these words.

## **Question 44:**

What is the Administration's understanding of the Prime Minister's statement that India's reprocessing rights are "permanent"? Specifically, does it mean that the U.S. will not have the right to withdraw its consent to India's reprocessing of U.S.-obligated nuclear material, even if the U.S. determines that the continuation of such activities would pose a serious threat to our national security or nonproliferation?

## Answer:

The U.S. has agreed to the reprocessing of U.S.-origin materials, to come into effect when the parties agree on "arrangements and procedures" and India establishes a new national reprocessing facility dedicated to reprocessing safeguarded material under IAEA safeguards. As with the arrangements governing reprocessing consents granted by the U.S. in connection with the Japan and EURATOM agreements, the proposed

arrangements and procedures with India will provide for withdrawal of reprocessing consent. Such a right is also included in Article 14.9 of the U.S.-India Agreement.

### **Question 45**:

In the conference report of the Hyde Act, Congress stated that it intended for the United States to "seek agreement among Nuclear Suppliers Group members that violations by one country of an agreement with any Nuclear Suppliers Group member should result in joint action by all members, including, as appropriate, the termination of nuclear exports." Will the administration be seeking such a commitment when it proposes that the Nuclear Suppliers Group provide a nuclear trade rule exemption for India? If not, why not?

### Answer:

Paragraph 16 of the Nuclear Suppliers Group Guidelines for Nuclear Transfers (INFCIRC/254/Rev.8/Part 1) provides that suppliers should (1) consult if, *inter alia*, one or more suppliers believe there has been a violation of a supplier/recipient understanding; (2) avoid acting in a manner that could prejudice measures that may be adopted in response to such a violation; and (3) agree on "an appropriate response and possible action, which could include the termination of nuclear transfers to that recipient." Assuming the Nuclear Suppliers Group agrees by consensus to an exception for India, this guideline would apply in the case of any nuclear transfers by a Nuclear Suppliers Group supplier to India. The Administration believes that the existing provisions of paragraph 16 of the Guidelines serve the Congressional concerns expressed in the conference report on the Hyde Act, and therefore no further elaboration is needed in connection with the proposed exception for India.