## **CRS** Report for Congress

Received through the CRS Web

# U.S.-India Nuclear Cooperation: A Side-By-Side Comparison of Current Legislation

## **Updated November 22, 2006**

Sharon Squassoni Specialist in National Defense Foreign Affairs, Defense, and Trade Division

Jill Marie Parillo Research Associate Foreign Affairs, Defense, and Trade Division

## U.S.-India Nuclear Cooperation: A Side-By-Side Comparison of Current Legislation

## Summary

In March 2006, the Bush Administration proposed legislation to create an exception for India from certain provisions of the Atomic Energy Act to facilitate a future nuclear cooperation agreement. After hearings in April and May, the House International Relations Committee and the Senate Foreign Relations Committee considered bills in late June 2006 to provide an exception for India to certain provisions of the Atomic Energy Act related to a peaceful nuclear cooperation agreement. On July 26, 2006, the House passed its version of the legislation, H.R. 5682, by a vote of 359 to 68. On November 16, 2006, the Senate incorporated the text of S. 3709, as amended, into H.R. 5682 and passed that bill by a vote of 85 to 12. The Senate insisted on its amendment, and a conference committee will likely be selected during the week of December 4, 2006.

The Senate and House versions of the India bill contain similar provisions, with four major differences. The Senate version contains an additional requirement for the President to execute his waiver authority, an amendment introduced by Senator Harkin and adopted by unanimous consent that the President determine that India is "fully and actively participating in U.S. and international efforts to dissuade, sanction and contain Iran for its nuclear program." The Senate version also has two unique sections related to the cooperation agreement, Sections 106 and 107. Section 106 prohibits exports of equipment, material or technology related for uranium enrichment, spent fuel reprocessing or heavy water production unless conducted in a multinational facility participating in a project approved by the International Atomic Energy Agency (IAEA) or in a facility participating in a bilateral or multilateral project to develop a proliferation-resistant fuel cycle. Section 107 would establish a program to monitor that U.S. technology is being used appropriately by Indian recipients. Finally, the Senate version also contains the implementing legislation for the U.S. Additional Protocol in Title II. Minor differences in reporting requirements and statements of policy are compared in Table I of this report.

This report provides a thematic side-by-side comparison of the provisions of the two bills, H.R. 5682 as passed by the House and H.R. 5682 as passed by the Senate, and compares them with the Administration's initially proposed legislation, H.R. 4974/S. 2429. The report concludes with a list of CRS resources that provide further discussion and more detailed analysis of the issues addressed by the legislation summarized in the table. This reported will be updated as necessary.

## **Contents**

Overview	1
H.R. 5682	1
Committee Actions	1
Floor Debate and Votes	4
S. 3709/H.R. 5682	4
Committee Actions	4
Floor Debate and Votes	5
Additional Resources	26
List of Tables	
Table 1: Comparison of Current Legislation on Waivers for U.SIndia Nuclear Cooperation	9

## U.S.-India Nuclear Cooperation: A Side-By-Side Comparison of Current Legislation

### Overview

In July 2005, President Bush announced his intention to conclude a peaceful nuclear cooperation agreement with India. India, which is not a party to the Nuclear Nonproliferation Treaty (NPT), is considered under U.S. law to be a non-nuclear weapon state, yet has tested nuclear weapons and has an ongoing nuclear weapons program. For these reasons, the President would need to make certain waivers and determinations pursuant to the Atomic Energy Act (AEA) before nuclear cooperation with a state such as India could proceed.

The Administration proposed legislation (introduced as H.R. 4974/S. 2429) in March 2006 that, in addition to providing waivers of relevant provisions of the AEA (Sections 123 a. (2), 128, and 129), would have allowed a nuclear cooperation agreement with India to enter into force without a vote from Congress, as though it conformed to AEA requirements. In late June, the House International Relations Committee and Senate Foreign Relations Committee reported their versions of legislation (H.R. 5682 and S. 3709), both of which provide the requisite waivers, retain the requirement for a joint resolution of Congress for such an agreement to enter into force, and contain some restrictions. On July 26, 2006, the House passed H.R. 5682 by a vote of 359 to 68. On November 16, 2006, the Senate passed H.R. 5682 by a vote of 85 to 12, substituting the text of S. 3709 as an engrossed amendment; the Senate insisted on its amendment, necessitating a conference to resolve differences between the bills. Neither chamber has voted on conferees, but this will likely occur the week of December 4, 2006. Given the bill's apparent high priority for the Bush Administration, there will likely be significant pressure to complete the process in this Congress.

#### H.R. 5682

**Committee Actions.** The House International Relations Committee met on June 27, 2006 to consider H.R. 5682, "United States and India Nuclear Cooperation Promotion Act of 2006," introduced on June 26 by Representative Hyde.<sup>1</sup> The Committee voted to adopt 6 of 12 amendments (one was withdrawn):

<sup>&</sup>lt;sup>1</sup> The National Journal and Congressional Quarterly wrote reports of the HIRC mark-up, available at [http://nationaljournal.com/members/markups/2006/06/mr\_20060627\_5.htm] and [http://www.cq.com/display.do?dockey=/cqonline/prod/data/docs/html/committees/109/committees109-2006062700228055.html@committees&metapub=CQ-COMMITTEEMARKUPS&searchIndex=0&seqNum=1].

- Representative Royce offered an amendment to ensure that nothing in the Act shall be interpreted as permitting any civil nuclear cooperation with India that would in any way assist, encourage, or induce India to manufacture or otherwise acquire nuclear weapons (Section 4 (d) (1));
- Representative Sherman offered an amendment to strengthen one of the determinations the President must make to implement the waivers pertaining to the Nuclear Suppliers Group (NSG), stipulating that the required NSG decision would not permit nuclear commerce with any other non-nuclear weapon state that does not have full-scope International Atomic Energy Act (IAEA) safeguards (Section 4 (b) (7)).
- Representative Schiff offered an amendment with three components: to add a provision to U.S. policy with respect to South Asia (Section 3 (b)(7)) encouraging India not to increase its production of fissile material at military facilities pending a multilateral moratorium on production of such material for nuclear weapons; to add a reporting requirement for the Presidential submission to implement the waivers (Section 4 (c) (2) (I)) on steps taken to ensure the U.S. transfers will not be replicated by India or used in its military facilities and that U.S. nuclear fuel supply does not facilitate military production of high-enriched uranium or plutonium; and to add a reporting requirement for an annual report on the same (Section 4 (o) (2) (C)).
- Representative Crowley offered an amendment to add a requirement (Section 4 (o)(3)) for an annual report on new Indian nuclear facilities.
- Representative Berkley offered two amendments related to India's spent fuel disposal: an annual report describing the disposal of spent nuclear fuel from India's civil nuclear program (Section 4 (o) (4), and a statement of policy that any spent civilian nuclear fuel in India that might be stored in the United States is considered by Congress under existing procedures of the Atomic Energy Act (Section 3 (b) (7)).

An amendment by Ms. Berkley to prohibit any Indian spent fuel from being stored in the United States was rejected by a vote of 15-19. The Committee also voted down four other amendments, including two by Representative Berman designed to place limits on U.S. cooperation until India halts production of fissile material for nuclear weapons. The first Berman amendment, rejected by a vote of 13-32, sought to condition the President's use of waiver authority (by adding a new determination by the President in Section 4 (b) of the bill) on India's adherence to a unilateral or multilateral moratorium or a multilateral treaty prohibiting the production of fissile material for nuclear weapons. The second amendment, rejected by a vote of 12-31, sought to restrict transfers of U.S. nuclear material under a cooperation agreement until such time that India halted fissile material production for weapons, either by adhering to a unilateral or multilateral moratorium, or a multilateral treaty. The Committee also rejected by a vote of 10-32 an amendment by Representative Sherman to condition the President's use of waiver authority on an additional determination, under Section 4 (b) of H.R. 5682, that India's nuclear weapons program was not using more domestic uranium than it had before July 2005.

The amendment would have attached an annual certification that required termination of nuclear cooperation if the certification could not be made. Finally, the Committee rejected, by a vote of 4-37, an amendment by Representative Lee that would have required India to join the Nuclear Nonproliferation Treaty (NPT) before the President could exercise his waiver authority.

The Committee on Rules held a hearing on July 25<sup>th</sup> to consider amendments to H.R. 5682 and procedures for handling the bill on the floor. H. Res 947 waived all points of order against the bill, specified the allowed amendments and limited floor debate to one hour. The following six amendments were allowed to be offered on the floor:<sup>2</sup>

- Representatives Hyde (IL)/Lantos (CA): Manager's amendment, containing technical and conforming changes to the text, as well as one substantive change: removing an amendment proposed by Representative Sherman and adopted during the full committee markup relating to subsection 4(b)(7).
- Representative Stearns (FL): Reinforces the intent of Congress that the nuclear cooperation into which the governments of the United States and India would enter is for peaceful, productive purposes, not military.
- Representatives Jackson-Lee (TX)/Burton (IN): Sense of Congress declaring the importance of the South Asia region and urging the continuation of the United States' policy of engagement, collaboration, and exchanges with and between India and Pakistan.
- Representative Sherman (CA): Requires that, before any nuclear cooperation with India can go forward, and every year thereafter, the President must certify that during the preceding year India has not increased the level of domestic uranium it sends through its weapons program. Baseline for the determination under the amendment is the 365 day period preceding the July 18, 2005, Bush-Singh declaration on nuclear cooperation.
- Representative Berman (CA): Restricts exports of uranium and other types of nuclear reactor fuel (defined as 'source material' and 'special nuclear material' in the Atomic Energy Act of 1954) to India until the President determines that India has halted the production of fissile material (i.e., plutonium and highly enriched uranium) for use in nuclear weapons.
- Representative Fortenberry (NE): Provides Congress with the ability to assess, to the extent possible, whether annual levels of India's nuclear fissile production may imply a possible violation of Article I of the Nuclear Nonproliferation Treaty.

<sup>&</sup>lt;sup>2</sup> See description in H.Rept. 109-599, "Providing for Consideration of H.R. 5682, United States and India Nuclear Cooperation Promotion Act of 2006," *Congressional Record*, July 25, 2006, p. H5820.

Three amendments were not allowed for consideration on the floor.<sup>3</sup> These were:

- An amendment by Representative Woolsey that would have prohibited the export of any nuclear-related item to India until the President has implemented and observed all NPT obligations and commitments of the United States and has revised United States' policies relating to nuclear weapons accordingly;
- An amendment by Representative Barbara Lee that would have required India to place all electricity-producing reactors under safeguards, undertake a binding obligation not to transfer any nuclear-weapon-related information or technology (per Article I of the NPT) and take concrete steps toward disarmament;
- An amendment by Representatives Markey and Upton that would have prohibited nuclear cooperation with India from commencing until the President has determined that the United States has secured India's full and active support in preventing Iran from acquiring weapons of mass destruction.

Floor Debate and Votes. The House first considered H. Res 947, which, after several objections to limits on time and the exclusion of certain amendments by Representative Markey and others, passed by a vote of 311 to 112. Of the six amendments considered, three passed by voice vote (the Managers' amendment, Representatives Jackson-Lee/Burton's amendment, and Representative Fortenberry's amendment); Representative Stearn's amendment was recorded as 414-0, and the amendments offered by Representatives Sherman and Berman were defeated (the votes, respectively, were 155 to 268, and 184 to 241).

Representative Markey made a motion to recommit the legislation back to the House International Relations Committee with instructions to include language that would require that nuclear cooperation with India could only commence after the president has determined that the United States has secured India's full support in preventing Iran from acquiring weapons of mass destruction. That motion to recommit was defeated in a vote of 192 to 235.

The House passed H.R. 5682, "Henry J. Hyde United States and India Nuclear Cooperation Promotion Act of 2006," as amended, by 359 to 68.

### S. 3709/H.R. 5682

**Committee Actions.** On June 29, 2006, the Senate Foreign Relations Committee considered original legislation, S. 3709, to create an exception for India

<sup>&</sup>lt;sup>3</sup> A fourth amendment, proposed by Mr. Hyde, would have implemented a Congressional review process for arms sales and exports under the Arms Export Control Act, but this amendment was withdrawn.

from relevant provisions of the Atomic Energy Act (See S.Rept. 109-288).<sup>4</sup> The Committee voted to adopt 2 of 3 amendments:

- Senator Chafee offered an amendment making it U.S. policy to ensure that exports of nuclear fuel to India did not encourage India to increase its production of fissile material (Section 103 (9));
- Senator Obama offered an amendment to ensure that the United States did not encourage other states to continue nuclear exports to India, if the United States exports to India terminated under U.S. law (Section 102 (6)).

The Committee rejected an amendment by Senator Feingold requiring an additional presidential determination in Section 105 of the bill by a vote of 5-13. The Feingold amendment would have conditioned the President's use of waiver authority on a determination that U.S. civil nuclear assistance to India would in no way assist, encourage, or induce India to manufacture nuclear weapons or nuclear devices. The amendment was identical in text to the Schiff amendment to H.R. 5682, but sought instead to require a determination rather than a report.

**Floor Debate and Votes.** An initial attempt to bring S. 3709 to the Senate floor in September failed to gain unanimous consent agreement. Among several issues, two apparently delayed the bill — language in Title II pertaining to implementing legislation for the U.S. Additional Protocol, and potential concern about whether the United States would accept U.S.-origin spent fuel back from Indian reactors. In the first case, concerns appeared to be mostly resolved by incorporating language into a manager's amendment, with the exception of two issues raised by Senator Ensign in two amendments he introduced on the floor on November 16<sup>th</sup> that did not pass. These are described in more detail below. In the second case, the concern about disposition of Indian spent fuel was dropped prior to the bill's reaching the floor.

On November 15, 2006, the Senate agreed by unanimous consent to consider S. 3709, at a time to be determined by the Majority Leader, in consultation with the Democratic Leader.<sup>5</sup> The unanimous consent agreement specified that a managers' amendment would serve as the original text for the purpose of further amendment; and that the only other amendments to be considered would include the following: Senators Ensign (considered in closed session), Reed, Levin, Obama, Dorgan (two amendments), Feingold, Boxer, Feinstein, Harkin, Bingaman (up to seven amendments), Kennedy, and Dodd. Of these, Senators Reed, Levin, Kennedy, and Dodd did not introduce amendments, and Senator Bingaman introduced three, rather than seven. All but Senator Feingold's amendment were considered to be relevant second-degree amendments and related to the subject matter of the bill. Further, the

<sup>&</sup>lt;sup>4</sup> Details on the mark-up are available at *Congressional Quarterly*, [http://www.cq.com/display.do?dockey=/cqonline/prod/data/docs/html/committees/109/committees109-2006062900228090.html@committees&metapub=CQ-COMMITTEEMARKUPS&searchIndex=0&seqNum=1] for report of the mark-up.

<sup>&</sup>lt;sup>5</sup> Congressional Record, November 15, 2006, p. S. 10941-42, daily edition.

unanimous consent agreement provided that once the bill was read a third time, the Senate would begin consideration of H.R. 5682, the House-passed companion, striking all text after the enacting clause and inserting the amended text of S. 3709 in its place.

Senator Lugar introduced the bill and offered a section-by-section analysis.<sup>6</sup> The following amendments, in brief, were passed either by unanimous consent or voice vote without debate:

- Senator Lugar introduced a manager's amendment, which contained new language in Title II related to the Additional Protocol (S.A. 5168; unanimous consent);
- Senator Obama introduced an amendment containing a statement of U.S. policy (which became Section 114) 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 reactor operating requirements (S.A. 5169; voice vote);<sup>7</sup>
- Senator Harkin introduced an amendment requiring the President to determine, before executing his waiver authority, that India was supporting U.S. and international efforts to dissuade, sanction, and contain Iran's nuclear program (S.A. 5173; unanimous consent);<sup>8</sup>
- Senator Bingaman introduced an amendment to add a reporting requirement to Section 108 (b) on the amount of uranium mined in India during the previous year; the amount of such uranium that has likely been used or allocated for the production of nuclear explosive devices; and the rate of production in India of fissile material for nuclear explosive devices and of nuclear explosive devices as well as an analysis as to whether imported uranium has affected the rate of production in India of nuclear explosive devices (S.A. 5179; unanimous consent);<sup>9</sup>
- Senator Bingaman introduced an amendment to add a new Section in Title I (which became Section 115) requiring the Secretary of Energy to create a Cooperative Threat Reduction Program with India (S.A. 5180; unanimous consent).

Senator Lugar's amendment, S.A. 5168 contained minor changes in Title I of S. 3709 as reported out of Committee. One potentially significant change was the deletion of a Sense of Congress on licensing policy in Section 106. In Title II, however, which contains the implementing legislation for the U.S. Additional

<sup>&</sup>lt;sup>6</sup> See Senator Lugar's opening statement in the *Congressional Record*, November 16, 2006, S10982-84, daily edition.

<sup>&</sup>lt;sup>7</sup> See *Congressional Record*, November 16, 2006, S11021, daily edition, for the colloquy between Senator Obama and the managers of the bill on the subject of limiting nuclear fuel reserves to provide a disincentive for India to conduct future nuclear tests.

<sup>&</sup>lt;sup>8</sup> See *Congressional Record*, November 16, 2006, S10996, daily edition, for Senator Harkin's description of the amendment.

<sup>&</sup>lt;sup>9</sup> See *Congressional Record*, November 16, 2006, S. 11003, daily edition for the text of Senator Bingaman's amendments, S.A. 5179 and 5180.

Protocol,<sup>10</sup> significant provisions were added. These included Section 202 on findings, Section 251 (3), and Sections 254, 261, 262 and 271-275. In his opening statement, Senator Lugar reported that "a compromise was reached between the Administration, the Senate Foreign Relations Committee, and those Senators who expressed concern about the IAEA Additional Protocol implementing legislation." These additional provisions appear to make explicit existing U.S. rights to exclude inspectors and certain kinds of inspection activities under the Additional Protocol. Several of the modifications address the use of environmental sampling, both for specific locations and for detecting anomalies in a wide-area mode.

Other amendments were introduced, debated, and defeated. These included the following:

- Senator Bingaman introduced an amendment requiring a Presidential determination that the United States and India are taking specific steps to conclude a multilateral treaty on the cessation of fissile material for weapons before U.S. nuclear equipment or technology could be exported under the future agreement for cooperation and that no nuclear materials may be exported to India unless the President has determined that India has stopped producing fissile materials for weapons (S.A. 5174; Vote 26-74);<sup>12</sup>
- Senator Dorgan introduced an amendment to add a declaration of U.S. policy to continue to support implementation of United Nations Security Council Resolution 1172 (S.A. 5178; Vote 27-71);<sup>13</sup>
- Senator Ensign introduced an amendment to Title II of the bill related to the Additional Protocol that would have required any inspection equipment, materials and resources to have been purchased, owned, inspected, and controlled by the United States (S.A. 5181; Vote 27-71);<sup>14</sup>
- Senator Dorgan introduced an amendment that would have required the President to determine, before executing his waiver authority, that India has committed to putting all electricity-producing nuclear reactors under safeguards, has undertaken an obligation not to proliferate nuclear weapons technology, has joined a legally-binding nuclear test moratorium; is verifiably reducing its nuclear weapons

<sup>&</sup>lt;sup>10</sup> The Additional Protocol is a protocol to IAEA safeguards agreements under the Nuclear Nonproliferaton Treaty (NPT) which enhances the IAEA's inspection rights, methods, and information. The model agreement is INFCIRC/540. Nuclear weapon states have modified the model to include provisions for national security exclusions, because of their weapons status. The United States signed its additional protocol in 1998, and the Senate gave its consent for ratification in 2004, but the additional protocol requires implementing legislation to enter into force. The Senate Foreign Relations Committee reported out such implementing legislation, S. 2489, in April 2006.

<sup>&</sup>lt;sup>11</sup> Congressional Record, November 16, 2006, S10984, daily edition.

<sup>&</sup>lt;sup>12</sup> Congressional Record, November 16, 2006, S. 10998-11001, daily edition, for Senator Bingaman's explanation of his amendments and responses by Senators Lugar and Biden..

<sup>&</sup>lt;sup>13</sup> Congressional Record, November 16, 2006, S11001, daily edition.

<sup>&</sup>lt;sup>14</sup> Congressional Record, November 16, 2006, S11009, daily edition, for text of Ensign amendment. The debate was held in closed session.

- stockpile, and has undertaken an obligation to agree to ultimate disarmament (S.A. 5182; voice vote);<sup>15</sup>
- Senator Feingold introduced an amendment that would have required the President to determine, before executing his waiver authority, that the scope and content of the cooperation agreement would not allow India to use U.S. technology, equipment or material in unsafe guarded facilities, would not result in India replicating U.S. technology nuclear fuel and would not facilitate the increased production by India of fissile material in unsafeguarded nuclear facilities (S.A. 5183; Vote 25-71);<sup>16</sup>
- Senator Boxer introduced an amendment that would have required the President to determine, before he could execute his waiver authority, that India had halted military-to-military contacts with Iran (S.A. 5187; Vote 38-59).<sup>17</sup>

Most of these amendments were characterized by Senators Lugar and Biden as "killer amendments." Senator Bingaman described his amendment as implementing a proposal by former Senator Nunn. <sup>18</sup> Senator Dorgan's amendment supporting U.S. implementation of U.N. Security Council 1172 sought to reaffirm U.S. support for the steps endorsed by the U.N. Security Council following the 1998 Indian and Pakistani nuclear tests, including limits on those nuclear programs such as a ban on deployments, and fissile material production for weapons, as well as a commitment on all states' parts not to sell nuclear technology to India and Pakistan. Senator Dorgan's other amendment, S.A. 5182, was similar to Representative Barbara Lee's amendment to the House bill that was rejected by the House Rules Committee. That amendment attempted to commit India to undertake the same obligations as other nuclear weapon states under the NPT. Senator Feingold's amendment was similar to the one he introduced in Committee that was rejected. Although modified to address objections voiced in the mark-up, the amendment was described by Senator Lugar on the floor as requiring a certification that would have been "impossible to make." Senator Ensign's amendment was debated in closed session, apparently because of the potential need to discuss classified information relating to the protection of national security information during IAEA inspections under an Additional Protocol in the United States.

<sup>&</sup>lt;sup>15</sup> See *Congressional Record*, November 16, 2006, S11006, daily edition, for Senator Dorgan's introduction of the amendment and debate.

<sup>&</sup>lt;sup>16</sup> See *Congressional Record*, November 16, 2006, S11011-15, daily edition, for Senator Feingold's introduction of the amendment and debate.

<sup>&</sup>lt;sup>17</sup> See *Congressional Record*, November 16, 2006, S11016-11019, daily edition, for Senator Boxer's introduction of the amendment and debate.

<sup>&</sup>lt;sup>18</sup> Congressional Record, November 16, 2006, S109998-11000, daily edition.

<sup>&</sup>lt;sup>19</sup> Congressional Record, November 16, 2006, S11014, daily edition.

Table 1: Comparison of Current Legislation on Waivers for U.S.-India Nuclear Cooperation

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Waiver authority	Provides authority for President to waive Atomic Energy Act (AEA) requirements.	Section 1 (a): President may waive sections of AEA (see below) if he makes a determination.	Section 4 (a): Same as H.R. 4974.	Section 104 (a): Same as H.R. 4974.
Section 123 a. (2) of Atomic Energy Act (AEA)	Full-scope safeguards.	Section 1 (a) (1): Waived AND the future cooperation agreement enters into force as though it met all Section 123 a. requirements (does not require a Joint Resolution of Approval).	Section 4 (a) (1): Waived BUT entry into force requires Joint Resolution of Approval as all other exempted agreements (See also Section 4 (e)).	Section 104 (a) (1): Equivalent to H.R. 5682. See Section 104 (b).
Section 128 of AEA	Annual review by Congress of export license for an agreement exempted from full- scope safeguards requirement.	Section 1 (a) (2): Application of Section 128 waived without conditions.	Section 4 (a) (2): Waiver ends if India engages in any Section 129 actions (see description below for Section 129), except for its ongoing weapons program [129 a. (1) (D)] and future reprocessing transfers to a non-nuclear weapon state [129 a. (2) (C)].	

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Section 129 of AEA	a. Terminate U.S. nuclear exports if President determines that a (1) non-nuclear weapon state: (A) Has tested a nuclear device (B) terminates or abrogates IAEA safeguards (C) materially violates IAEA safeguards (D) Has ongoing nuclear weapons program OR if President determines (2) any state  (A) materially violates a cooperation agreement (B) assists non-nuclear weapon state in nwrelated activities (C) Has agreement or transfers reprocessing material, technology, or equipment to a non-nuclear weapon state.	Section 1 (a) (3): "Sanctions" under Section 129 waived.	Section 4 (a) (3): Waiver of Section 129 limited to: Indian nuclear tests before 2005 [Section 129 a. (1) (A)] and ongoing nuclear weapons activities [Section 129 a. (1) (D)].	Section 104 (a) (3): Equivalent to H.R. 5682 but worded differently. The language specifies waiver for sanctions under Section 129 a. (1) (D), but covers the 1998 Indian nuclear test by waiving any Section 129 sanctions regarding any actions that occurred before July 18, 2005. (There has only been one Presidential determination for India prior to 2005 that is relevant to Section 129 — for the Indian nuclear test in 1998).

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Determination	Establishes threshold for President to use waiver authority.	Section 1b: President must make 1 determination that 7 actions have occurred (see below).	Section 4 (b): Same requirements with minor changes that strengthen measures. Specifies safeguards in perpetuity.	Section 105: Same requirements with minor changes that strengthen measures. Specifies safeguards in perpetuity.
Separation plan	Identification of Indian civilian nuclear facilities to US and IAEA.	(1) India has provided to US and IAEA a credible plan to separate civil and military facilities, materials, and programs, and has filed a declaration regarding its civil facilities with the IAEA.	Section 4 (b) (1): Same language as H.R. 4974.	Section 105 (1) and (2) Same language as H.R. 4974 but separates the declaration provision into Section 105 (2).
Safeguards plan	India committed to placing additional civilian nuclear facilities under IAEA safeguards under the July 18, 2005, Joint Statement.	(2) Entry into force of safeguards agreement in accordance with IAEA practices for India's civil nuclear facilities as declared in the plan.	Section 4 (b) (2): Specifies safeguards in perpetuity in accordance with IAEA standards, principles and practices. Also mentions safeguards on materials and programs, including materials used in or produced through use of civil nuclear facilities.	perpetuity in accordance with

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Additional Protocol	An agreement with IAEA to enhance inspections, access, and declarations relevant to safeguards.	(3) Making satisfactory progress toward implementation.	Section 4 (b) (3) Specifies "substantial progress" consistent with IAEA principles, practices and policies.	Section 105 (4) Specifies "substantial progress."
FMCT (Fissile Material Production Cutoff Treaty)	Future negotiations to end production of fissile material for nuclear weapons.	(4) Working with the United States for conclusion of a multilateral FMCT.	Section 4 (b) (4) Specifies working "actively" for the "early" conclusion.	Section 105 (5) Equivalent to H.R. 4974.
Halting enrichment/ reprocessing transfers	July 18, 2005, commitment by India to support U.S. policy to restrict access to enrichment and reprocessing.	(5) Supporting international efforts to prevent the spread of enrichment and reprocessing technology.	Section 4 (b) (5) Specifies "working with and supporting US and international efforts."	Section 105 (6) Specifies preventing spread "to any state that does not already possess full-scale, functioning enrichment and reprocessing plants."
Export controls	July 18, 2005 commitment by India to strengthen export controls and adhere to international norms, including Missile Technology Control Regime (MTCR) and Nuclear Suppliers Group (NSG) guidelines.	(6) Ensuring that necessary steps are taken to secure nuclear materials and technology through comprehensive export control legislation and regulations; and harmonization and adherence to MTCR and NSG guidelines.	Section 4 (b) (6) Specifies enactment and enforcement of export control laws; specifies harmonization of laws, regulations, policies and practices with the policies and practices of MTCR and NSG.	Section 105 (7) Specifies effective enforcement actions.

Issue/Provision		H.R. 4974/S. 2429 as introduced	as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Nuclear Suppliers Group (NSG)	currently prohibit nuclear transfers to India; a decision must be taken to allow cooperation. NSG		Specifies NSG consensus decision.	Section 105 (9) Specifies NSG consensus decision that does not permit an exception for another non- nuclear weapon state.
Iran	Ensure that India is supporting U.S. and international efforts to dissuade, sanction, and contain Iran's nuclear program	NONE	(4) statement of policy on India's support for U.S. efforts vis-a-vis Iran.	Section 105 (8) Requires India's full & active participation in U.S. and international efforts to dissuade, sanction, and contain Iran for its nuclear program consistent with U.N. Security Council resolutions

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Report on Determination	Notify Congress that 7 actions have occurred to allow waiver.	Section 1 c. Report to HIRC, SFRC that 7 actions have occurred, including basis for determination.	Section 4 (c) (2): Provides details about what reports to HIRC, SFRC should contain, specifically on the 7 actions. Also, two other reports are required for the determination: a description of the scope of the 123 agreement with the US and the steps taken to ensure that U.S. assistance will not aid India's nuclear weapons program (Schiff amendment).	Section 105: Determination must be made in writing to appropriate Committees.  Similar reports are required in Section 108 (a) (1), but are not tied to President's determination.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Termination	Establish a threshold for halting U.S. exports to India (now contained in Section 129 of the AEA and in the proposed peaceful nuclear cooperation agreement itself, which is not yet drafted).	Section 1d. All waiver authorities (for Section 123 a. (2), Section 128, and Section 129) terminate if India tests a nuclear explosive device.	Section 4 (a) (3): All termination provisions of Section 129 of the AEA (except 129 a.(1) (D)) would be in effect (see description of sec.129 waiver above).	Section 104 (a) (3): All termination provisions of Section 129 of the AEA (except 129 a.(1) (D)) would be in effect (see description of sec.129 waiver above).
			ALSO Section 4 (d) (3): Exports would terminate if India makes a materially significant transfer of items in violation of NSG guidelines, or of items in violation of MTCR guidelines.	No equivalent provision to H.R. 5682 but Section 108 (b) (3) (A) contains a reporting reqt if India does not comply with NSG guidelines and Section 108 (b) (4) (A) requires an annual certification that India is in full compliance with all July 18, 2005 commitments.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Sense of Congress	To describe Congress's policy objectives with respect to nuclear cooperation with India.	NONE		Section 102 Notes that engaging India is in the national security interest of the United States, but need to minimize proliferation risk. United States should not facilitate trade by other nations if U.S. exports terminated.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Statements of Policy (I)	To describe U.S. policy objectives, with respect to nonproliferation.	NONE	Section 3 (a) General (1) Oppose nuclear weapons development.	Section 103 Section 103 (8): maintain support for NPT.
			(2) Support peaceful uses of nuclear energy, but only with full NPT compliance.	No equivalent
			(3) Strengthen NSG implementation, including cutoff of exports for violations.	Similar to Section 103 (6) on support for NSG.
Statements of Policy (II)	To describe U.S. policy objectives, with respect to South Asia, U.SIndia bilateral relations, and South Asian proliferation.	NONE	Section 3 (b) South Asia (1) Fissile material production moratorium for India, Pakistan, China.	Section 103 (1), but moratorium does not include China.
			(2) FMCT	No equivalent
			(3) Other nonproliferation activities, like PSI, Australia Group, Wassenaar, Convention on Supplementary Compensation.	Section 103 (2), but no mention of Convention on Supplementary Compensation.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
			(4) Support for U.S. policies to prevent Iran from acquiring nuclear weapons.	No equivalent, but language similar to Section 105 (8) determination
			(5) Cap, roll back and eliminate South Asian nuclear arsenals.	No equivalent
			(6) No spent fuel transfer without Congressional approval.	No equivalent
			(7) Encourage cap on production of fissile material for weapons, pending moratorium.	No equivalent provision
Statements of Policy (III)		NONE	No equivalent provision	Section 103 (3): Full compliance with all nonproliferation obligations.
			No equivalent provision	Section 103 (4): Ensure reliability of safeguards and Additional Protocol.
			No equivalent provision	Section 103 (5): Agreement must meet all other Section 123 a. requirements.
			No equivalent provision	Section 103 (6): Consistency with NSG guidelines.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
			No equivalent provision	Section 103 (7): Work with NSG members to restrict transfers of enrichment and reprocessing, also to India.
			No equivalent provision	Section 103 (8): Maintain support for adherence & compliance with NPT.
			No equivalent provision	Section 103 (9): Exports of nuclear fuel to India should not contribute to or encourage India to increase production of fissile material for military uses.
			No equivalent provision	Section 114: Any nuclear power reactor fuel reserve provided to India should be commensurate with reasonable reactor operating requirements

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Expedited procedures	To provide procedures for expedited consideration of Joint Resolution of Approval	None, except as provided already in Section 130 of AEA	Section 4 (f) and (g): track with existing law (Section 130 of AEA).	None, except as provided already in Section 130 of AEA.
End-Use Monitoring	To provide reasonable assurances that the recipient is complying with relevant requirements, terms and conditions of U.S. export licenses.	NONE	NONE	Section 107 requires following measures: (1) Obtain and implement assurances and conditions regarding end-use monitoring; (2) a detailed system of reporting on technology transfers, including those authorized by Section 57 b of AEA.  (3) Fall-back safeguards, should IAEA be unable to implement safeguards in India.

Issue/Provision	1 1	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Restrictions on cooperation		NONE	Section 4 (d) (1) No assistance that would aid India's nuclear weapons program.	No equivalent but similar concept behind Section 106, Section 103 (9)
			(2) No transfers if they would violate NSG guidelines.	Similar to Section 103 (6): to act in a manner fully consistent with NSG guidelines (but this is only a Statement of Policy).
			(4) President should seek to prevent cooperation by other states with India if United States terminates exports.	Section 102 (6): United States should not seek to facilitate cooperation by other states with India if United States terminates exports.
			No equivalent provision	Section 106 Bans cooperation on enrichment, reprocessing, and heavy water materials, equipment, and technology with exception for multilateral and bilateral fuel cycle cooperation, if President determines that the export will not improve India's ability to produce nuclear weapons. ability to produce fissile material for weapons.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Other reporting		NONE	Section 4 (j) (1): annual report on U.S. policy objectives for South Asia (i.e., steps taken by the United States and India, extent of success, and cooperation by other countries).	No equivalent provision
			Section 4 (j) (2) Annual report on U.S. nuclear exports to India, including estimates of Indian uranium mining, fissile material and nuclear weapons production rates; as well as impact of imported uranium on such rates. Report also to describe India's use of any U.S. nuclear equipment, material or technology in an uninspected facility; replication of anything transferred and whether imported nuclear fuel has helped to increase fissile material production for weapons.	Section 108 (b) (6) Annual report on estimated amount of uranium mined in India during the previous year(A); amount of such uranium that has likely been used or allocated for the production of nuclear explosive devices (B); and the rate of production in India of fissile material for nuclear explosive devices(C)(I); and of nuclear explosive devices(C)(ii)  Section 108 (b) (7) Analysis on whether imported uranium has affected the rate of production in India of nuclear explosive devices.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Other reporting, continued		NONE	Section 4 (j) (3): annual report on new Indian nuclear facilities.	Section 108 (b) (2): list of licenses approved by NRC, DOE, Commerce or any other U.S. authorizations of exports and reexports of nuclear materials and equipment.
			Section 4 (j) (4): annual report on India's spent fuel disposal.	No equivalent provision
			Section 4 (j) (5): annual report on growth in India's military fissile material production, to include information on Indian uranium mining, electricity production, domestic uranium used in civilian electricity production, & military fissile material production, etc.	
			No equivalent provision	Section 108 (b) (3): Any significant nuclear commerce between India and other countries that does not comply with NSG guidelines, or would not meet standards applied to U.Sorigin material.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced	H.R. 5682 as passed by House	H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Other Presidential certifications		NONE	NONE	Section 108 (b) (4): That India is in full compliance with following obligations (listed in Section 108 (a) (1)): Joint Statement commitments, separation plan, safeguards agreement, Additional Protocol, 123 agreement, terms and conditions of approved export licenses. If certification is not possible, report on steps, responses and implications.
Consultation with Congress		NONE	Section 4 (e (2): Requires monthly consultations with Congress on progress in 123 agreement negotiations and IAEA safeguards agreement negotiations.	No equivalent provision
			No equivalent provision	Section 108 (a): keep Congress fully informed on India's: (1) non-compliance (2) nuclear facility construction (3) fissile material production (4) changes in operational status of nuclear facilities.

Issue/Provision	Description/Purpose	H.R. 4974/S. 2429 as introduced		H.R. 5682 as passed by the Senate (with text of S. 3709 as engrossed amendment)
Program for cooperative threat reduction	To further common nonproliferation goals, including scientific research and development efforts related to nuclear nonproliferation, with emphasis on nuclear safeguards	NONE	NONE	Section 115 Requires Secretary of Energy to establish a United States-India Scientific Cooperative Threat Reduction Program.
TITLE II	Implementing Legislation for the U.S. Additional Protocol	NONE	NONE	Entire Title II See. S. 2489 for comparison and S. 3709 as reported out of committee for differences between those and the version voted on by the Senate.

## **Additional Resources**

CRS Report RL33016, *U.S. Nuclear Cooperation with India: Issues for Congress*, by Sharon Squassoni.

CRS Report RL33292, *India's Nuclear Separation Plan: Issues and Views*, by Sharon Squassoni.

CRS Report RL33072, *U.S.-India Bilateral Agreements in 2005*, by K. Alan Kronstadt.

CRS Report RS22474, Banning Fissile Material Production for Nuclear Weapons: Prospects for a Treaty (FMCT) by Sharon Squassoni, Andrew Demkee, and Jill Marie Parillo.