

Nuclear Cooperation with Other Countries: A Primer

Paul K. Kerr Analyst in Nonproliferation

Mary Beth Nikitin Specialist in Nonproliferation

June 19, 2012

Congressional Research Service 7-5700 www.crs.gov RS22937

Summary

In order for the United States to engage in civilian nuclear cooperation with other states, it must conclude a framework agreement that meets specific requirements under Section 123 of the Atomic Energy Act (AEA). The AEA also provides for exemptions to these requirements, export control licensing procedures, and criteria for terminating cooperation. Congressional review is required for Section 123 agreements; the AEA establishes special parliamentary procedures by which Congress may act on a proposed agreement.

Contents

What Is a "Section 123" Agreement?	1
Requirements Under the Atomic Energy Act	2
Exempted vs. Non-exempted Agreements	3
Congressional Review	3
Export Licensing	4
Subsequent Arrangements	5
Examples of Subsequent Arrangements	7
U.SJapan Agreement	
U.SIndia Agreement	
Iran-Related Restrictions	
Termination of Cooperation	8
Legislation in the 112 th Congress	8
S. 109	9
H.R. 1280	
H.R. 1280, Amended	1
H.R. 1320	
FY2012 Intelligence Authorization Act (P.L. 112-87)1	3
H.R. 1905 and H.R. 2105	
S. 1048	5

Contacts

Author Contact Information	5
----------------------------	---

What Is a "Section 123" Agreement?

Under existing law (Atomic Energy Act [AEA] of 1954, as amended; P.L. 95-242; 42 U.S.C. §2153 et seq.)¹ all significant U.S. nuclear cooperation with other countries requires a peaceful nuclear cooperation agreement.² Significant nuclear cooperation includes the transfer of U.S.-origin special nuclear material³ subject to licensing for commercial, medical, and industrial purposes. Such agreements, which are "congressional-executive agreements" requiring congressional approval, do not guarantee that cooperation will take place or that nuclear material will be transferred, but rather set the terms of reference and authorize cooperation. The AEA includes requirements for an agreement's content, conditions for the President to exempt an agreement from those requirements, presidential determinations and other supporting information to be submitted to Congress, conditions affecting the implementation of an agreement.

Section 123 of the AEA requires that any agreement for nuclear cooperation meet nine nonproliferation criteria and that the President submit any such agreement to the House Committee on Foreign Affairs and the Senate Committee on Foreign Relations. The Department of State is required to provide the President an unclassified Nuclear Proliferation Assessment Statement (NPAS), which the President is to submit, along with the agreement, to those two committees. The State Department is also required to provide a classified annex to the NPAS, prepared in consultation with the Director of National Intelligence. The NPAS is meant to explain how the agreement meets the AEA nonproliferation requirements. The President must also make a written determination "that the performance of the proposed agreement will promote and will not constitute an unreasonable risk to, the common defense and security."

¹ The Atomic Energy Act (AEA) was amended by the Nuclear Nonproliferation Act of 1978 (NNPA) (P.L. 95-242) to include stringent nonproliferation requirements for significant U.S. nuclear exports. For example, the act required non-nuclear-weapon states to have full-scope International Atomic Energy Agency safeguards as a condition for entering into nuclear cooperation agreements with the United States. For existing and future agreements, the NNPA added a provision for Congress to review export licenses. The act also included a provision for halting exports if a country tested a nuclear device, violated safeguards agreements, or continued nuclear weapons-related activities.

² Section 57 b. (2) of the AEA allows for limited forms of nuclear cooperation related to the "development or production of any special nuclear material outside of the United States" without a nuclear cooperation agreement if that activity has been authorized by the Secretary of Energy following a determination that it "will not be inimical to the interest of the United States." Agreements governing such cooperation are also known as "Section 810" agreements, after 10 Code of Federal Regulations Part 810.

A nuclear cooperation agreement is not required for transmission of nuclear-related information, except for restricted data. The term "restricted data," as well as other terms used in the statute, is defined in 42 U.S.C. §2014. "Restricted data" means "all data concerning (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy." Restricted data, however does not "include data declassified or removed from the Restricted Data [sic] category" pursuant to the AEA. A nuclear cooperation agreement is necessary, though not necessarily sufficient, to permit the transfer of restricted data.

³ "Special nuclear material" means (1) plutonium, uranium enriched in the isotopes 233 or 235, and any other material that is determined to be special nuclear material, but does not include source material, or (2) any material artificially enriched by any of the foregoing, but does not include source material.

Requirements Under the Atomic Energy Act

Section 123 of the AEA specifies the necessary steps for engaging in nuclear cooperation with another country.

- Section 123a. states that the proposed agreement is to include the terms, conditions, duration, nature, and scope of cooperation and lists nine criteria that the agreement must meet. It also contains provisions for the President to exempt an agreement from any of several criteria described in that section and includes details on the kinds of information the executive branch must provide to Congress.
- Section 123b. specifies the process for submitting the text of the agreement to Congress.
- Section 123c. specifies how Congress approves cooperation agreements that are limited in scope (e.g., do not transfer nuclear material or cover reactors larger than 5 MWe). This report does not discuss such agreements.
- Section 123d. specifies how Congress approves agreements that do cover significant nuclear cooperation (transfer of nuclear material or reactors larger than 5 MWe), including exempted agreements.

Section 123a., paragraphs (1) through (9), lists nine criteria that an agreement with a non-nuclear weapon state must meet unless the President determines an exemption is necessary. These include guarantees that

- safeguards on transferred nuclear material and equipment continue in perpetuity;
- full-scope International Atomic Energy Agency (IAEA) safeguards are applied in non-nuclear weapon states;
- nothing transferred is used for any nuclear explosive device or for any other military purpose; the United States has the right to demand the return of transferred nuclear materials and equipment, as well as any special nuclear material produced through their use, if the cooperating state detonates a nuclear explosive device or terminates or abrogates an IAEA safeguards agreement;
- there is no retransfer of material or classified data without U.S. consent;
- physical security on nuclear material is maintained;
- there is no enrichment or reprocessing by the recipient state of transferred nuclear material or nuclear material produced with materials or facilities transferred pursuant to the agreement without prior approval;
- storage for transferred plutonium and highly enriched uranium is approved in advance by the United States; and
- any material or facility produced or constructed through use of special nuclear technology transferred under the cooperation agreement is subject to all of the above requirements.

Exempted vs. Non-exempted Agreements

The President may exempt an agreement for cooperation from any of the requirements in Section 123a. if he determines that the requirement would be "seriously prejudicial to the achievement of U.S. non-proliferation objectives or otherwise jeopardize the common defense and security." The AEA provides different requirements, conditions, and procedures for exempt and non-exempt agreements.⁴ To date, all of the Section 123 agreements in force are non-exempt agreements.⁵ Prior to the adoption of P.L. 109-401, the Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006, the President would have needed to exempt the nuclear cooperation agreement with India from some requirements of Section 123 a. P.L. 109-401, however, exempted nuclear cooperation with India from some of the AEA's requirements.⁶

Congressional Review

Under the AEA, Congress has the opportunity to review a 123 agreement for two time periods totaling 90 days of continuous session.⁷ The President must submit the text of the proposed nuclear cooperation agreement, along with required supporting documents (including the unclassified NPAS) to the House Foreign Affairs Committee and the Senate Foreign Relations Committee. The President is to consult with the committees "for a period of not less than 30 days of continuous session." After this period of consultation, the President is to submit the agreement to Congress, along with the classified annex to the NPAS and a statement of his approval of the agreement and determination that it will not damage the national security interests of the United States. This action begins the second period, which consists of 60 days of continuous session. In practice, the President has sent the agreement to Congress at the beginning of the full 90-day period, which begins on the date of transmittal. Typically, the 60-day period has immediately followed the expiration of the 30-day period. The President transmits the text of the proposed agreement along with a letter of support with a national security determination, the unclassified NPAS, its classified annex, and letters of support for the agreement from the Secretary of State and the Nuclear Regulatory Commission.

If the President has not exempted the agreement from any requirements of Section 123a., it becomes effective at the end of the 60-day period unless, during that time, Congress adopts a joint resolution disapproving the agreement and the resolution becomes law. If the agreement is an exempted agreement, Congress must adopt a joint resolution of approval and it must become law

⁴ Nuclear cooperation agreements with nuclear weapon states recognized by the NPT are provided for in the AEA, and are therefore non-exempt agreements. The NPT defines nuclear weapon states as those that exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967: China, France, Russia, the United Kingdom, and the United States.

⁵ The United States has concluded more than 20 bilateral nuclear cooperation agreements, as well as similar agreements with the European Atomic Energy Community and the IAEA. See *Nuclear Commerce: Governmentwide Strategy Could Help Increase Commercial Benefits from U.S. Nuclear Cooperation Agreements with Other Countries*, Government Accountability Office, GAO-11-36, November 2010.

⁶ See CRS Report RL33016, U.S. Nuclear Cooperation with India: Issues for Congress, by Paul K. Kerr. The agreement entered into force in December 2008.

⁷ When calculating periods of "continuous session" under the AEA, every calendar day is counted, including Saturdays and Sundays. Only days on which either chamber has adjourned for more than three days pursuant to the adoption a concurrent resolution authorizing the adjournment do not count toward the total. If Congress adjourns its final session *sine die*, continuity of session is broken, and the count must start anew when it reconvenes.

by the end of the 60-day period or the agreement will not enter into force. At the beginning of this 60-day period, joint resolutions of approval or disapproval, as appropriate, are to be automatically introduced in each house. During this period, the committees are to hold hearings on the proposed agreement and "submit a report to their respective bodies recommending whether it should be approved or disapproved." If either committee has not reported the requisite joint resolution of approval or disapproval by the end of 45 days, it is automatically discharged from further consideration of the measure. After the joint resolution is reported or discharged, Congress is to consider it under expedited procedures, as established by Section 130.i. of the AEA.

Section 202 of P.L. 110-369, the United States-India Nuclear Cooperation Approval and Nonproliferation Enhancement Act, which President Bush signed into law October 8, 2008, amended Section 123 of the AEA to require the President to keep the Senate Foreign Relations Committee and the House Foreign Affairs Committee "fully and currently informed of any initiative or negotiations relating to a new or amended agreement for peaceful nuclear cooperation."

Export Licensing

The AEA sets out procedures for licensing exports to states with whom the United States has nuclear cooperation agreements. (Sections 126, 127, and 128 codified as amended at 42 U.S.C. 2155, 2156, 2157.) Each export of nuclear material, equipment, or technology requires a specific export license or other authorization. The Nuclear Regulatory Commission (NRC) is required to meet criteria in Sections 127 and 128 in authorizing export licenses. These criteria are as follows:

- Application of IAEA safeguards to any material or facilities proposed to be exported, material or facilities previously exported, and to any special nuclear material used in or produced through the use thereof (these are not full-scope safeguards, but safeguards required under Article III.2 of the nuclear Nonproliferation Treaty [NPT]).
- Nothing exported can be used for any nuclear explosive device or for research on or development of any nuclear explosive device.
- Recipient states must have adequate physical security on "such material or facilities proposed to be exported and to any special nuclear material used in or produced through the use thereof."
- Recipient states are not to retransfer exported nuclear materials, facilities, sensitive nuclear technology, or "special nuclear material produced through the use of such material" without prior U.S. approval.
- Recipient states may not reprocess or alter in form or content exported nuclear material or special nuclear material produced though the use of exported nuclear material without prior U.S. approval.
- The foregoing conditions must be applied to any nuclear material or equipment that is produced or constructed under the jurisdiction of the recipient by or through the use of any exported sensitive nuclear technology.
- Section 128 requires that recipient non-nuclear-weapon states must have fullscope IAEA safeguards.

The President must judge that the proposed export or exemption will "not be inimical to the common defense and security" or that any export of that type "would not be inimical to the common defense and security because it lacks significance for nuclear explosive purposes." The executive branch may also consider other factors, such as "whether the license or exemption will materially advance the nonproliferation policy of the United States by encouraging the recipient nation to adhere" to the NPT; whether "failure to issue the license or grant the exemption would otherwise be seriously prejudicial" to U.S. nonproliferation objectives; and whether the recipient nation has agreed to conditions identical to those laid out in Section 127.

Section 126b. (2) contains a provision for the President to authorize an export in the event that the NRC deems that the export would not meet Section 127 and 128 criteria. The President must determine "that failure to approve an export would be seriously prejudicial to the achievement of U.S. nonproliferation objectives or otherwise jeopardize the common defense and security." In that case, the President would submit his executive order, along with a detailed assessment and other documentation, to Congress for 60 days of continuous session. After 60 days of continuous session, the export would go through unless Congress were to adopt a concurrent resolution of disapproval.⁸

Section 128b.(2) contains a provision for the President to waive termination of exports by notifying the Congress that the state has adopted full-scope safeguards or that the state has made significant progress toward adopting such safeguards, or that U.S. foreign policy interests dictate reconsideration. Such a determination would become effective unless Congress were to adopt a concurrent resolution of disapproval within 60 days of continuous session.

Additionally, Section 129b.(1) forbids the export of "nuclear materials and equipment or sensitive nuclear technology" to any country designated as a state sponsor of terrorism.⁹ Section 129b.(3) allows the President to waive this provision.

Subsequent Arrangements

Section 131 of the Atomic Energy Act details procedures for subsequent arrangements to nuclear cooperation agreements concluded pursuant to Section 123. Such arrangements are required for forms of nuclear cooperation requiring additional congressional approval, such as transfers of nuclear material or technology and recipient states' enrichment or reprocessing of nuclear materials transferred pursuant to the agreement. Subsequent arrangements may also include arrangements for physical security, storage, or disposition of spent nuclear fuel; the application of safeguards on nuclear materials or equipment; or "any other arrangement which the President finds to be important from the standpoint of preventing proliferation."

⁸ In light of the Supreme Court's 1983 decision in *INS v. Chadha*, passing a concurrent resolution could invite a legal challenge because it is arguably unconstitutional. Although not provided for in the AEA, Congress could choose to pass a joint resolution of disapproval or a bill stating in substance it did not approve.

⁹ Section 129b. (2) states that the prohibitions described in the previous section "shall not apply to exports, reexports, transfers, or retransfers of radiation monitoring technologies, surveillance equipment, seals, cameras, tamper-indication devices, nuclear detectors, monitoring systems, or equipment necessary to safely store, transport, or remove hazardous materials ... except to the extent that such technologies, equipment, seals, cameras, devices, detectors, or systems are available for use in the design or construction of nuclear reactors or nuclear weapons."

Before entering into a subsequent arrangement, the Secretary of Energy must publish in the *Federal Register* a determination that the arrangement "will not be inimical to the common defense and security." A proposed subsequent arrangement shall not take effect before 15 days after publication of both this determination and notice of the proposed arrangement. The Secretary of State is required to prepare an unclassified Nuclear Proliferation Assessment Statement (NPAS) if, "in the view of" the Secretary of State, Secretary of Energy, Secretary of Defense, or the Nuclear Regulatory Commission, a proposed subsequent arrangement "might significantly contribute to proliferation." The Secretary of State is to submit the NPAS to the Secretary of Energy within 60 days of receiving a copy of the proposed subsequent arrangement. The President may waive the 60-day requirement if the Secretary of State so requests, but must notify both the House Foreign Affairs Committee and Senate Foreign Relations Committee of any such waiver and the justification for it. The Secretary of Energy may not enter into the subsequent arrangement before receiving the NPAS.

Section 131 specifies requirements for certain types of subsequent arrangements. Section 131b. describes procedures for the executive branch to follow before entering into a subsequent arrangement involving the reprocessing of U.S.-origin nuclear material or nuclear material produced with U.S.-supplied nuclear technology. These procedures also cover subsequent arrangements allowing the retransfer of such material to a "third country for reprocessing" or "the subsequent retransfer" of more than 500 grams of any plutonium produced by reprocessing such material. The Secretary of Energy must provide both the House Foreign Affairs Committee and Senate Foreign Relations Committee with a report describing the reasons for entering into the arrangement, unless the President judges that "an emergency exists due to unforeseen circumstances requiring immediate entry" into the arrangement. In such a case, the waiting period would be 15 calendar days.

If a subsequent arrangement described in the above paragraph involves a facility that has not processed spent nuclear reactor fuel prior to March 10, 1978 (when the Nuclear Nonproliferation Act of 1978 was enacted), the Secretaries of State and Energy must judge that the arrangement "will not result in a significant increase of the risk of proliferation." In making this judgment, the Secretaries are to give "foremost consideration ... to whether or not the reprocessing or retransfer 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 non-nuclear-weapon state could transform the diverted material into a nuclear explosive device."¹⁰ For a subsequent arrangement involving reprocessing in a facility that has processed spent nuclear reactor fuel prior to March 10, 1978, the Secretary of Energy will "attempt to ensure" that reprocessing "shall take place under conditions" that would satisfy the timely-warning conditions described above. Section 131f. specifies procedures for congressional approval of subsequent arrangements involving the storage or disposition of foreign spent nuclear fuel in the United States.

Section 133 states that, before approving a subsequent arrangement involving certain transfers of special nuclear material, the Secretary of Energy must consult with the Secretary of Defense "on whether the physical protection of that material during the export or transfer will be adequate to deter theft, sabotage, and other acts of international terrorism which would result in the diversion

¹⁰ These provisions also applies to facilities that, prior to March 18, 1978, did not have a subsequent arrangement for reprocessing.

of that material.¹¹ If the Secretary of Defense determines that "the export or transfer might be subject to a genuine terrorist threat," that Secretary is required to provide a written risk assessment of the risk and a "description of the actions" that he or she "considers necessary to upgrade physical protection measures."

Examples of Subsequent Arrangements

U.S.-Japan Agreement

The first test of the subsequent arrangement provisions came in August 1978, when the Department of Energy informed the House and Senate foreign relations committees of a Japanese request for approval of the transfer of spent fuel assemblies from Japan to the United Kingdom for reprocessing. This was the first "subsequent arrangement" approved. The United States and Japan entered into similar arrangements until 1988, when the two governments revised their nuclear cooperation agreement. That agreement included an "implementing agreement," which provided 30-year advance consent for the transfer of spent fuel from Japan to Europe for reprocessing. While controversial, Congress did not block the nuclear cooperation agreement.

A subsequent arrangement was also necessary for the sea transport from Europe to Japan of plutonium that had been separated from the Japanese spent fuel. The Department of Energy approved a Japanese request for 30-year advance consent for the sea transport of plutonium. It was submitted to Congress as a subsequent arrangement, and took effect in October 1988.

U.S.-India Agreement

The U.S. nuclear cooperation agreement with India grants New Delhi consent to reprocess nuclear material transferred pursuant to the agreement, as well as "nuclear material and by-product material used in or produced through the use of nuclear material, non-nuclear material, or equipment so transferred." However, the agreement also includes a requirement that India first build a new national reprocessing facility to be operated under IAEA safeguards. The two countries signed a subsequent arrangement July 30, 2010, which governs the procedures for operating two new reprocessing facilities in India. The agreement also describes procedures for U.S. officials to inspect and receive information about physical protection measures at the new facilities. The arrangement would not have taken effect if Congress had adopted a joint resolution.¹² If India were to construct any additional facilities to reprocess fuel from U.S.-supplied reactors, a new subsequent arrangement would need to be submitted to Congress.

¹¹ This section applies to "the export or transfer of more than 2 kilograms of plutonium or more than 5 kilograms of uranium enriched to more than 20 percent in the isotope 233 or the isotope 235."

¹² Section 201 of the United States-India Nuclear Cooperation Approval and Nonproliferation Enhancement Act (P.L. 110-369), which approved the U.S.-India cooperation agreement, specifies procedures (different from those described in the Atomic Energy Act) for Congress to consider subsequent arrangements to that agreement.

Iran-Related Restrictions

The Comprehensive Iran Sanctions, Accountability, and Divestment Act (CISADA) of 2010 (P.L. 111-195), which became law July 1, 2010, contains additional restrictions on licensing nuclear exports to countries with entities that have been sanctioned for conducting certain types of energy-related transactions with Iran. Section 102 a.(2)(A) of the law states that "no license may be issued for the export, and no approval may be given for the transfer or retransfer" of "any nuclear material, facilities, components, or other goods, services, or technology that are or would be subject to an agreement for cooperation between the United States" and such countries. Section 102 a.(2)(B), however, allows the President to waive these restrictions. Section 102 a.(2)(C), allows the President to authorize licenses for nuclear exports "on a case-by-case basis" to entities (which have not been sanctioned) in countries subject to the restrictions described above.¹³

Termination of Cooperation

Section 129a. of the AEA requires that the United States end exports of nuclear materials and equipment or sensitive nuclear technology to any non-nuclear-weapon state that, after March 10, 1978, the President determines to have detonated a nuclear explosive device; terminated or abrogated IAEA safeguards; materially violated an IAEA safeguards agreement; or engaged in activities involving source or special nuclear material and having "direct significance" for the manufacture or acquisition of nuclear explosive devices, and "has failed to take steps which, in the President's judgment, represent sufficient progress toward terminating such activities."

Section 129a. also requires that the United States halt exports to any nation the President determines to have materially violated the terms of an agreement for cooperation with the United States; assisted, encouraged, or induced any non-nuclear weapon state to obtain nuclear explosives or the materials and technologies needed to manufacture them; or re-transferred or entered into an agreement for exporting reprocessing equipment, materials, or technology to a non-nuclear weapon state, unless in connection with an international agreement to which the United States subscribes.

The President can waive termination of exports if he determines that "cessation of such exports would be seriously prejudicial to the achievement of United States nonproliferation objectives or otherwise jeopardize the common defense and security." The President must submit his determination to Congress, which is then referred to the House Committee on Foreign Affairs and the Senate Foreign Relations Committee for 60 days of continuous session. The determination becomes effective unless Congress adopts a joint resolution opposing the determination.

Legislation in the 112th Congress

Congress has intensely debated the requirements of the Atomic Energy Act for nuclear cooperation agreements, most notably prior to the approval of the 2008 U.S.-India nuclear cooperation agreement. During the past two years, several hearings have been held, particularly

¹³ For details on these sanctions, see CRS Report RS20871, Iran Sanctions, by Kenneth Katzman.

by the House Foreign Affairs Committee and its Nonproliferation, Terrorism, and Trade Subcommittee, to discuss whether Congress should legislate stronger nonproliferation standards and congressional oversight for nuclear cooperation agreements. This issue continues to be a subject of attention in the 112th Congress.

S. 109

On January 25, 2011, Senator John Ensign introduced S. 109, which was discharged from the Committee on Finance and forwarded to the Committee on Foreign Relations on February 3. This bill would change current congressional review requirements by mandating positive congressional approval of all Section 123 agreements. It would also require a joint resolution of approval for subsequent arrangements (under Section 131 a(1)), and a nuclear proliferation assessment statement to be submitted along with proposals for subsequent arrangements.

S. 109 would also seek to strengthen congressional oversight of the negotiation of nuclear cooperation agreements. The bill would require the President to keep the House Foreign Affairs Committee and the Senate Foreign Relations Committee "fully and currently informed of any initiative or negotiations" relating to a new or amended nuclear cooperation agreement prior to any public presidential announcements. S. 109 would also require the President to consult with relevant committees "not less than 15 calendar days" after the start of negotiations, and on a monthly basis during negotiations. As noted, current law requires only that the President keep Congress "fully and currently informed of any initiative or negotiations relating to" a new nuclear cooperation agreement.

H.R. 1280

On March 31, 2011, the chairman of the House Foreign Affairs Committee, Representative Ileana Ros-Lehtinen, introduced H.R. 1280. The bill, which has bipartisan co-sponsorship, would increase congressional oversight over the negotiation and approval of 123 agreements and subsequent arrangements. For example, it would change the Atomic Energy Act's congressional review requirements by requiring that Congress adopt a joint resolution of approval within 60 days of continuous session before any nuclear cooperation agreement could go into effect (the 60 days would be part of the 90-day period of continuous session described above). The bill would also require a joint resolution of approval for subsequent arrangements under nuclear cooperation agreements. Additionally, H.R. 1280 contains S. 109's notification and consultation provisions.

H.R. 1280 would also add new nonproliferation criteria to Section 123a.¹⁴ Section 1 of the bill would require governments wishing to conclude nuclear cooperation agreements with the United States to

• guarantee that third-country nationals will not be permitted, without prior U.S. consent, access to facilities, material or technology transferred under the agreement;

¹⁴ This summary is not meant to be exhaustive, and the full bill text should be consulted.

- forswear "enrichment or reprocessing activities, or acquisition or construction of facilities for such activities," if the country did not operate enrichment or reprocessing facilities as of April 1, 2011;
- accede to and fully implement the Chemical Weapons Convention, the Biological Weapons Convention, and "all other international agreements to which the United States is a party related to export controls on nuclear, chemical, biological, and advanced conventional weapons";
- have an effective export control system and implement UN Security Council Resolution 1540¹⁵;
- be fully compliant with United Nations conventions and Security Council resolutions related to nonproliferation, including the Convention of the Physical Protection of Nuclear Material and the Nuclear Terrorism Convention;
- not be a Destination of Diversion Concern as defined by CISADA (P.L. 111-195)¹⁶;
- closely cooperate with the United States to prevent states sponsors of terrorism from acquiring nuclear, biological, chemical, or advanced conventional weapons;
- have an Additional Protocol to its safeguards agreement with the IAEA fully in force;
- agree to refrain from using nuclear material or equipment acquired from non-U.S. sources (in addition to such material or equipment obtained from the United States) for a "nuclear explosive device" or any other military purpose; and
- guarantee that it will maintain "adequate physical security" on all special nuclear material, in addition to such material produced using material or equipment obtained from the United States.

The bill contains several other significant provisions. Section 2 would prohibit any U.S. assistance, other than humanitarian aid, to a cooperating country that has withdrawn from the NPT. Moreover, the country would be asked to return any material, equipment, or components transferred under a nuclear cooperation agreement (on or after the bill's enactment date), and any special fissionable material produced using material or equipment previously transferred. Section 7 of the bill would prohibit the President from issuing an export license pursuant to a nuclear cooperation agreement unless the cooperating country had liability protection for United States nuclear suppliers "equivalent to the liability protection specified under the Convention on Supplementary Compensation for Nuclear Damage." Section 3 of the bill would require the executive branch to produce a report detailing the nonproliferation conditions of other nuclear suppliers. Section 5 would require termination of nuclear exports to a cooperating country that

¹⁵ That resolution requires states to "take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials."

¹⁶ CISADA states that the President "shall designate a country as a Destination of Diversion Concern if the President determines that the government of the country allows substantial diversion of goods, services, or technologies" described in the law "through the country to Iranian end-users or Iranian intermediaries."

had been "determined to be a 'country of proliferation concern" pursuant to the 2010 National Defense Authorization Act.¹⁷

H.R. 1280, Amended

On April 14, the House Foreign Affairs Committee amended H.R. 1280. An agreement lacking a legally binding requirement for the cooperating country to refrain from enrichment or reprocessing activities (or constructing facilities for such activities) could not enter into effect, according to the amended bill, unless Congress were to adopt a joint resolution of approval within 60 days of continuous session. An agreement including such a provision would become effective after 60 days of continuous session unless Congress were to adopt a joint resolution of disapproval (the 60 days referred to in this and the previous sentence would be part of the 90-day period of continuous session described above).¹⁸

The amended version of H.R. 1280 would also prohibit any U.S. assistance, other than humanitarian aid, to a cooperating country that has withdrawn from the NPT. However, only a cooperating country withdrawing after enactment of the proposed law would be subject to this prohibition. The amended bill also contains H.R. 1320's provisions regarding U.S. assistance as they pertain to state sponsors of proliferation and states without Additional Protocols in force (see below).

The committee also adopted two amendments sponsored by Representative Brad Sherman. The first would amend Section 123 of the Atomic Energy Act to require that a cooperating country have a commitment to maintain or enact, as circumstances dictate, a "legal regime providing for adequate protection from civil liability that will allow for the participation of United States suppliers in any effort by the country to develop civilian nuclear power." The country would be required to have such a regime in place no later than one year after a nuclear cooperation agreement's entry into force.

The second expresses the sense of Congress that the President

should ensure that participation in international nuclear programs conducted by the United States is limited to the greatest extent practicable to governmental and nongovernmental participants from countries that have adopted nonproliferation provisions in their nuclear cooperation and nuclear export control policies comparable to the policies specified in section 123 of the Atomic Energy Act (42 U.S.C. 2153), as amended by this Act.

The amended H.R. 1280 and H.Rept. 112-507 were reported out of committee on May 30, 2012. H.R. 1280 was referred to the House Rules Committee and the House Committee on Energy and Commerce on May 30, 2012. Those committees have until October 1, 2012, to consider the bill.

¹⁷ That law defines a country of proliferation concern as "any country identified by the Director of Central Intelligence as having engaged in the acquisition of dual-use and other technology useful for the development or production of weapons of mass destruction (including nuclear weapons, chemical weapons, and biological weapons) or advanced conventional munitions."

¹⁸ The 60-day period would apply to new agreements. For a renewal agreement, Congress would need to adopt a joint resolution of disapproval within 30 days of continuous session. The amended text defines a "renewal agreement" as a nuclear cooperation agreement with a country which has previously entered into such an agreement with the United States. A "new" nuclear cooperation agreement, according to the draft legislation, is one with a country which has not previously entered into such an agreement with the United States.

The Administration's Response

The State Department articulated its opposition to H.R. 1280 in a July 15, 2011, fact sheet which argued that, were it to become law, the bill would damage nuclear cooperation agreements' "effectiveness as a nonproliferation tool."¹⁹ According to the State Department, it "would be difficult" for partners to nuclear cooperation agreements to accept the new conditions described in the bill. Moreover, "the United States would not be able to accept some of these conditions on a reciprocal basis, as would be required by virtually all of our partners," the fact sheet says, adding that the new requirements "would likely cause" such countries "to consider nuclear cooperation with other countries instead of the United States, thus preventing the achievement of the bill's nonproliferation objectives."

The State Department also described H.R. 1280's provision prohibiting third-party nationals' access to U.S.-supplied nuclear reactors, equipment, or technology without prior U.S. consent as "impractical," arguing that it would assert a U.S. "right to 'approve'" IAEA inspectors from third countries to gain access to such reactors, equipment, and technology, thereby interfering with the IAEA's ability to apply safeguards in the recipient country.

The fact sheet also criticizes H.R. 1280's liability provisions, arguing that they "would create a legal obligation to meet a vague standard, to be judged by others, that few states would be willing to accept," adding that "decisions about what constitutes adequate liability protection are commercial determinations that are best made by U.S. suppliers in the context of a particular transaction."

H.R. 1320

House Foreign Affairs Committee Ranking Member Howard Berman introduced H.R. 1320, cosponsored by Representative Brad Sherman, on April 1, 2011. The bill is divided into two sections—strengthening nonproliferation activities (Title I) and strengthening nuclear energy cooperation and nonproliferation (Title II).

Title I contains several provisions regarding U.S. assistance to other countries. Section 103 would require the U.S. government, before providing assistance, to consider whether a country has an Additional Protocol in force. Section 104 would prohibit U.S. assistance to state sponsors of proliferation of weapons of mass destruction.²⁰ Section 101 contains H.R. 1280's provisions regarding countries that have withdrawn from the NPT.

H.R. 1320 would also require payment of U.S. annual dues to the IAEA's regular budget, as well as a report detailing nonproliferation conditions of foreign nuclear suppliers. It would also require periodic security inspections on U.S. exports of nuclear material "to ensure that adequate physical safeguards and accounting measures are in effect for such nuclear material."

Title II would add conditions for new peaceful nuclear cooperation agreements. The bill contains H.R. 1280's provisions regarding additional protocols; third-country nationals' access to nuclear

¹⁹ http://www.state.gov/t/isn/rls/fs/168659.htm.

²⁰ The bill would require the Secretary of State to determine "that the government of the country has repeatedly provided support for acts of proliferation of equipment, technology, or materials to support the design, acquisition, manufacture, or use of weapons of mass destruction."

facilities, material, or technology; and the requirement that potential cooperating countries agree to refrain from using nuclear material or equipment acquired from non-U.S. sources for military purposes. Title II also contains a variation of H.R. 1280's enrichment and reprocessing provisions, but H.R. 1320 would not require a potential cooperating country to forswear these activities if they would be "pursued as part of a multilateral consortium of countries" that are NPT state-parties in good standing. The bill would require the consortium to have "the explicit support of the United States." Unlike H.R. 1280, H.R. 1320 does not specify that these requirements apply only to countries possessing enrichment and reprocessing facilities as of April 1, 2011. H.R. 1320 would also require the President to determine that a potential cooperating country had not engaged in any significant proliferation activities and was cooperating with the United States to halt proliferation.

The bill would also amend congressional review requirements. An agreement that complied with all of the nonproliferation criteria could be brought into effect 60 legislative days after the President had submitted the agreement to Congress, unless Congress were to adopt a joint resolution during those 60 days stating that Congress did not favor the agreement. If an agreement did not comply with the nonproliferation criteria and/or the required presidential determinations could not be made, Congress would be required to adopt a joint resolution of approval before the agreement entered into effect. Renewal agreements meeting the nonproliferation criteria and presidential determinations would need to sit before Congress for 30 calendar days before they could be brought into effect. A 45-legislative-day congressional review would be required for subsequent arrangements, after which time the arrangement would come into effect if Congress had not enacted a joint resolution of disapproval.

As with H.R. 1280, the bill says the President could not issue a license for export under the agreement to a cooperating country without liability protection for U.S. nuclear suppliers "equivalent to the liability protection specified under the Convention on Supplementary Compensation for Nuclear Damage."

H.R. 1320 would also give the President the option to make loan guarantees to countries that forego enrichment or reprocessing and with whom the United States has a 123 agreement.

FY2012 Intelligence Authorization Act (P.L. 112-87)

The Senate version of the FY2012 Intelligence Authorization Act (S. 1458) contained amendments to Section 123 of the AEA (as amended). The bill was reported out of committee in August 2011. The proposed amendments found in Section 305 of the bill would update language to reflect the establishment of the Director of National Intelligence and require additional input by the intelligence community in developing the NPAS for a 123 agreement. The Senate report explains:

Section 305 requires the Secretary of State and the DNI to provide an unclassified NPAS to the President. The first two sections of the NPAS, which mirror the current requirements, shall be prepared by the Secretary of State, in consultation with the Director of National Intelligence. A newly-required third section shall be prepared by the DNI, in consultation with the Secretary of State, and provide a comprehensive analysis of the country's export control system with respect to nuclear-related matters. A classified annex shall accompany the NPAS. The NPAS and its classified annex shall be provided to the congressional intelligence committees as well as the congressional foreign relations committees.

The companion House bill (H.R. 1892) was passed on September 9, 2011. H.R. 1892 would amend Section 102A of the National Security Act of 1947 by adding the DNI's role in producing the NPAS, as such:

Nuclear Proliferation Assessment Statements Intelligence Community Addendum- The Director of National Intelligence, in consultation with the heads of the appropriate elements of the intelligence community and the Secretary of State, shall provide to the President, the congressional intelligence committees, the Committee on Foreign Affairs of the House of Representatives, and the Committee on Foreign Relations of the Senate an addendum to each Nuclear Proliferation Assessment Statement accompanying a civilian nuclear cooperation agreement, containing a comprehensive analysis of the country's export control system with respect to nuclear-related matters, including interactions with other countries of proliferation concern and the actual or suspected nuclear, dual-use, or missile-related transfers to such countries.

The Intelligence Authorization Act for Fiscal Year 2012 (P.L. 112-87), Section 305, "Preparation of Nuclear Proliferation Assessment Statements," included the H.R. 1892 language on Nuclear Proliferation Assessment Statements cited above.

H.R. 1905 and H.R. 2105

These two bills, passed by the House on December 14, 2011, would restrict nuclear cooperation with countries sanctioned for providing certain types of technology to Iran, Syria, or North Korea. Section 105 (b)(2) of H.R. 1905 would prohibit export licenses and transfers of "any nuclear material, facilities, components, or other goods, services, or technology that are or would be subject to" a nuclear cooperation agreement between the United States and a government which has "primary jurisdiction" over a person subject to sanctions (described elsewhere in the bill) for "an activity" relating to "the acquisition or development of nuclear weapons or related technology or of missiles or advanced conventional weapons that are designed or modified to deliver a nuclear weapon." These sanctions, however, shall not apply to such a government if the President "determines and notifies the appropriate congressional committees" that the government "does not know or have reason to know about the activity" or "has taken, or is taking, all reasonable steps necessary to prevent a recurrence of the activity and to penalize the person for the activity." The bill also includes a provision which would allow transfers described above on a "case-by-case basis."

Section six of H.R. 2105 would prohibit the executive branch from submitting to Congress a nuclear cooperation agreement with any country "that is assisting the nuclear program of Iran, North Korea, or Syria, or transferring advanced conventional weapons or missiles" to those countries. The bill would also prohibit a nuclear cooperation agreement with such an assisting country from entering into force, as well as prohibit export licenses and transfers of "any nuclear material, facilities, components, or other goods, services, or technology that would be subject to" a nuclear cooperation agreement. All of these forms of nuclear cooperation would be prohibited until the President issued a determination and a report to Congress that Iran, North Korea, or Syria (as the case may be) "has ceased its efforts to design, develop, or acquire a nuclear explosive device or related materials or technology" or the assisting government has suspended the offending activities and "committed to maintaining that suspension" until Iran, North Korea, or Syria (as the case may be) "has implemented measures that would permit the President to make the determination" regarding those countries weapons programs. The bill names Russia as a

country that is "assisting the nuclear program of Iran, North Korea, or Syria or transferring advanced conventional weapons or missiles" to those countries.

S. 1048

The Senate passed H.R. 1905 on May 21, 2011, substituting Section 205(c) of S. 1048, which was introduced May 23, 2011, and about which the Committee on Banking, Housing, and Urban Affairs held hearings October 13, would require the Secretary of Energy, the Secretary of Commerce, and the Nuclear Regulatory Commission to certify to Congress that issuing an export license pursuant to a nuclear cooperation agreement would not "permit the transfer" of "any good or technology that the President determines is used, or is likely to be used, for military applications" to Iran, North Korea, or Syria.

As of mid-June 2012, the Senate and House versions of H.R. 1905 were awaiting conference action.

Author Contact Information

Paul K. Kerr Analyst in Nonproliferation pkerr@crs.loc.gov, 7-8693 Mary Beth Nikitin Specialist in Nonproliferation mnikitin@crs.loc.gov, 7-7745