
RECENT LEGISLATION

FOREIGN RELATIONS LAW — NUCLEAR NONPROLIFERATION — CONGRESS AUTHORIZES THE PRESIDENT TO WAIVE RESTRICTIONS ON NUCLEAR EXPORTS TO INDIA. — Henry J. Hyde United States–India Peaceful Atomic Energy Cooperation Act of 2006, Pub. L. No. 109-401, tit. I, 120 Stat. 2726 (to be codified at 22 U.S.C. §§ 2652c, 8001–8008, and 42 U.S.C. § 2153(d)).

Although preventing the further spread of nuclear weapons remains the principal concern of American nonproliferation policy, the United States must also confront the challenges posed by nations that have already developed nuclear weapons without the authorization of the Treaty on the Non-Proliferation of Nuclear Weapons¹ (NPT). Dealing with these de facto nuclear powers requires navigating a central tension: On one hand, deterring other states with nuclear ambitions calls for a hard-line policy of isolation and nonrecognition to discredit any notion that developing nuclear weapons is a ticket to world power status. On the other hand, the devastating threat posed by these weapons suggests the need for a policy of engagement to ensure that nations behave responsibly with their newly acquired arsenals. In resolving this tension, the United States has traditionally pursued the hard-line approach. Indeed, since India conducted its first nuclear test in 1974,² the United States has isolated it from the community of responsible nuclear states, refused to recognize it as a nuclear power, and denied it civil nuclear cooperation.³ In a dramatic reversal, however, President George W. Bush signed into law the Henry J. Hyde United States–India Peaceful Atomic Energy Cooperation Act of 2006⁴ (USIPAECA), implicitly acknowledging India as a nuclear power and

¹ July 1, 1968, 21 U.S.T. 483, 729 U.N.T.S. 161. The NPT, which has been signed by 190 nations, *see* U. N. Dep't for Disarmament Affairs, Non-Proliferation Treaty, <http://disarmament2.un.org/wmd/npt/index.html> (last visited Apr. 6, 2007), permits only five signatories — the United States, Russia, China, France, and the United Kingdom — to possess nuclear weapons. *See* Arms Control Ass'n, Fact Sheets: Nuclear Weapons: Who Has What at a Glance (Apr. 2005), <http://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat.asp>. India, Israel, and Pakistan did not sign the NPT but have nuclear weapons. *See* Nuclear Threat Initiative, Country Information Index, http://www.nti.org/e_research/profiles/index.html (last visited Apr. 6, 2007) (follow “India,” “Israel,” and “Pakistan” hyperlinks). Although its nuclear capability remains uncertain, North Korea withdrew from the NPT and conducted a nuclear test in 2006 as an attempt to announce its membership in the “nuclear club.” *See id.* (follow “North Korea” hyperlink).

² *See* GEORGE PERKOVICH, INDIA'S NUCLEAR BOMB: THE IMPACT ON GLOBAL PROLIFERATION 178 (1999).

³ *See* MICHAEL A. LEVI & CHARLES D. FERGUSON, COUNCIL ON FOREIGN RELATIONS, U.S.-INDIA NUCLEAR COOPERATION 7 (2006). “Civil nuclear cooperation” here refers to trade in materials, equipment, and technologies necessary for peaceful nuclear energy use.

⁴ Pub. L. No. 109-401, tit. I, 120 Stat. 2726 (to be codified at 22 U.S.C. §§ 2652c, 8001–8008, and 42 U.S.C. § 2153(d)).

opening the door to civil nuclear cooperation between the two nations. Although the USIPAECA correctly perceives the deficiencies of the NPT regime, its criteria for nuclear cooperation fail to address the full range of threats posed by a world in which many countries develop nuclear weapons despite nonproliferation efforts.

The USIPAECA exempts India from certain provisions of the Atomic Energy Act of 1954⁵ (AEA) in order to facilitate the completion of a nuclear cooperation agreement conditionally reached by President Bush and Indian Prime Minister Manmohan Singh on March 2, 2006.⁶ At the time of this deal, the AEA prohibited exports of “nuclear materials and equipment or sensitive nuclear technology” to India because it had conducted atomic tests and was operating a nuclear weapons program without being one of the five nuclear weapons states recognized by the NPT.⁷ Accordingly, to allow nuclear cooperation to proceed, the USIPAECA authorizes the President to waive the AEA provisions barring nuclear exports⁸ if he determines that India has provided a “credible plan to separate civil and military nuclear facilities” and identified these civil facilities to the International Atomic Energy Agency (IAEA);⁹ placed civil nuclear facilities under IAEA safeguards;¹⁰ made “substantial progress” toward an “Additional Protocol”¹¹ agreement with the IAEA;¹² cooperated with the United States in negotiating a multilateral treaty to stop the production of fissile materials for use in nuclear weapons;¹³ supported American and international efforts to restrict the spread of enrichment and reprocessing technology;¹⁴ strengthened export controls and adhered to international guidelines designed to secure nuclear materials and ballistic mis-

⁵ 42 U.S.C. §§ 2011 to 2297g-4 (2000 & Supp III 2003).

⁶ See LEVI & FERGUSON, *supra* note 3, at 3. Under the terms of this deal, President Bush promised to negotiate a formal nuclear cooperation agreement with India, to persuade Congress to amend U.S. laws barring civil nuclear trade with India, and to induce the leading trade cartel to ease its rules preventing nuclear trade with India. In exchange, India promised to refrain from testing nuclear weapons, to adhere to stringent standards for controlling sensitive nuclear exports, to separate civilian nuclear facilities from military facilities, and to submit these civilian establishments to permanent inspections by the International Atomic Energy Agency. *Id.*

⁷ See 42 U.S.C. § 2158 (2000).

⁸ Specifically, the President may waive sections 123(a)(2), 128, and 129 of the AEA. USIPAECA § 104(a), 120 Stat. at 2729.

⁹ *Id.* § 104(b)(1), 120 Stat. at 2729.

¹⁰ *Id.* § 104(b)(2), 120 Stat. at 2730.

¹¹ This protocol would likely expand the declarations India must make to the IAEA regarding its nuclear activities and provide for increased agency access to relevant facilities. For more background, see Theodore Hirsch, *The IAEA Additional Protocol: What It Is and Why It Matters*, NONPROLIFERATION REV., Fall–Winter 2004, at 140.

¹² USIPAECA § 104(b)(3), 120 Stat. at 2730.

¹³ *Id.* § 104(b)(4), 120 Stat. at 2730.

¹⁴ *Id.* § 104(b)(5), 120 Stat. at 2730.

sile technology;¹⁵ and obtained consensus permission from the Nuclear Suppliers Group¹⁶ (NSG) to receive nuclear materials.¹⁷

Recognizing that creating such an exception for India might lead other nuclear powers outside the NPT to demand equal treatment, Congress outlined criteria in the USIPAECA that it expects such states¹⁸ to meet before receiving consideration for a similar nuclear cooperation agreement. First, the country must have “demonstrated responsible behavior with respect to the nonproliferation of technology related to nuclear weapons and the means to deliver them.”¹⁹ Second, the country must have “a functioning and uninterrupted democratic system of government,” a foreign policy consistent with that of the United States, and a commitment to working with the United States on key nonproliferation initiatives.²⁰ Third, nuclear cooperation with the United States must induce the country to adopt “substantially improved protections” against the spread of nuclear weapons technology and to “refrain from actions that would further the development of its nuclear weapons program.”²¹ Fourth, cooperation must lead the country to increase “political and material support” for the achievement of American nonproliferation objectives, particularly with respect to combating “states that sponsor terrorism and terrorist groups that are seeking to acquire a nuclear weapons capability.”²²

¹⁵ *Id.* § 104(b)(6), 120 Stat. at 2730.

¹⁶ The NSG is a cartel of forty-five states that have adopted export controls and other means of “forgo[ing] nuclear trade with governments that do not subject themselves to international measures and inspections designed to provide confidence that their nuclear imports are not used to develop nuclear arms.” Arms Control Ass’n, Fact Sheets: The Nuclear Suppliers Group at a Glance (May 2006), <http://www.armscontrol.org/factsheets/NSG.asp>.

¹⁷ USIPAECA § 104(b)(7), 120 Stat. at 2730. The President’s determination must be submitted in a report to Congress. *Id.* § 104(c), 120 Stat. at 2730. The statute declares that the United States shall cease exporting nuclear materials to India if any Indian person transfers nuclear materials or ballistic missiles (or related equipment) in violation of NSG guidelines or other international norms. *Id.* § 104(d)(3), 120 Stat. at 2732. Furthermore, any waiver under section 104 shall “cease to be effective” if the President determines that “India has detonated a nuclear explosive device” after the legislation is enacted. *Id.* § 106, 120 Stat. at 2738. In addition to allowing the waiver of AEA restrictions, the USIPAECA authorizes the Secretary of Energy to establish a program funding cooperative research and development efforts among Indian and American scientists to further nonproliferation goals and to improve nuclear safeguards. *Id.* § 109, 120 Stat. at 2739.

¹⁸ The statute describes the criteria as applying to countries that “have never been a State Party to the NPT.” *Id.* § 102(6), 120 Stat. at 2726. Presumably, the criteria would not apply to current NPT parties or to countries that have withdrawn.

¹⁹ *Id.* § 102(6)(A), 120 Stat. at 2727.

²⁰ *Id.* § 102(6)(B), 120 Stat. at 2727.

²¹ *Id.* § 102(6)(C), 120 Stat. at 2727.

²² *Id.* § 102(6)(D), 120 Stat. at 2727. In addition to outlining this rather stringent set of requirements, the statute reaffirms the NPT as the “keystone of United States nonproliferation policy,” *id.* § 102(2), 120 Stat. at 2726, and mandates continued opposition to the development of nuclear weapons by “any non-nuclear weapon state, within or outside of the NPT,” *id.* § 103(a)(1), 120 Stat. at 2727.

Despite recognizing the dangers posed by the absence of formal nonproliferation obligations on the growing number of non-NPT nuclear powers, the USIPAECA continues the practice of excluding such states from institutions and incentive structures designed to promote responsible behavior. Although the current security environment requires this approach in order to deter other states from pursuing their nuclear ambitions, the United States might one day consider extending incentives for good conduct more broadly if the number of nuclear powers expands substantially despite nonproliferation efforts. In that scenario, policymakers seeking to define “responsible” nuclear behavior should not rely exclusively upon the USIPAECA cooperation criteria because the statute does not call on states to adopt adequate safeguards against crisis escalation and inadvertent nuclear exchange.

At first glance, the USIPAECA appears to be an important policy shift because it alludes to the inadequacy of the current nonproliferation regime. Although the statute clearly endorses the NPT,²³ it acknowledges that some nuclear powers “remain outside that treaty’s legal regime” and pose a “potential challenge to the achievement of the overall goals of global nonproliferation” because they have not undertaken obligations to behave responsibly with their arsenals.²⁴ The statute emphasizes that “it is in the interest of the United States . . . to ensure that [non-NPT nuclear powers] are responsible in the disposition of any nuclear technology they develop.”²⁵ Accordingly, section 104(b)’s conditions for waiving AEA restrictions on India and section 102(6)’s more general prerequisites for nuclear cooperation constitute a first attempt to define “responsible” behavior in the nonproliferation context. The underlying incentive structure is clear: states will receive the benefits of civil nuclear cooperation only if they demonstrate a history of responsible conduct and a commitment to preventing the spread of nuclear materials and technology. At least in theory, the statute contemplates extending the carrot of civil nuclear cooperation to *any* non-NPT nuclear power that conforms its behavior to these standards.

In practice, however, the USIPAECA represents a one-time exception that rewards an important strategic partner rather than a major policy shift toward creating formal incentives to induce nuclear pariahs to cooperate with nonproliferation controls. The United States has publicly indicated its unwillingness to extend cooperation to any non-NPT nuclear power other than India.²⁶ Moreover, the criteria laid out

²³ See *id.* § 102(2), 120 Stat. at 2726.

²⁴ *Id.* § 102(4), 120 Stat. at 2726.

²⁵ *Id.* § 102(5), 120 Stat. at 2726.

²⁶ For instance, during a March 2006 joint conference with Pakistani President Pervez Musharraf, President Bush explicitly rejected the possibility of nuclear cooperation with Islama-

by Congress in the statute itself seem uniquely applicable to India given that they are extremely difficult to achieve for many of the other non-NPT nuclear powers. For example, the text contemplates offering nuclear cooperation only to nuclear weapons states that have “never been . . . State Part[ies] to the NPT,”²⁷ seemingly excluding countries like North Korea, which withdrew from the NPT, or Iran, which is ostensibly still a party to the treaty despite having violated its terms repeatedly.²⁸ In addition, section 102(6)(B) limits nuclear cooperation deals to countries with a “functioning and uninterrupted democratic system of government.”²⁹ Whereas India has a long history of democracy, it seems overly, if not wildly, optimistic to imagine nuclear powers such as Pakistan and North Korea or potential nuclear weapons states like Iran replacing their current autocratic regimes with democratic governance anytime soon.³⁰ In turn, if these countries believe that they will be precluded from getting a nuclear cooperation deal because they do not meet the democracy requirement, their incentive to comply with some of the other nonproliferation requirements specified by Congress will be limited. As a result, the USIPAECA is unlikely to affect the behavior of the very nations whose autocratic governments and susceptibility to anti-Americanism make them the most dangerous potential nuclear proliferators.

The USIPAECA’s approach of restricting civil nuclear cooperation to only NPT states (and now India) mirrors a broader policy of excluding pariah states from multilateral nonproliferation efforts. Currently, the primary mechanisms through which the international community controls access to sensitive nuclear technologies and materials exclude states that are not parties to the NPT. The NSG, for example, requires its members to adhere to the NPT; as a result, non-NPT nuclear powers are largely exempted from its system of export controls.³¹ Pre-

bad, noting that American strategy going forward would take into account the “well-known differences” between India and Pakistan with respect to the threats of proliferation and terrorism. Elisabeth Bumiller & Carlotta Gall, *Bush Rules Out a Nuclear Deal with Pakistanis*, N.Y. TIMES, Mar. 5, 2006, § 1, at 1.

²⁷ USIPAECA § 102(6), 120 Stat. at 2726.

²⁸ See Nuclear Threat Initiative, *supra* note 1 (follow “Iran” and “North Korea” hyperlinks).

²⁹ USIPAECA § 102(6)(B), 120 Stat. at 2727.

³⁰ Pakistan, North Korea, and Iran were each rated as having the lowest possible level of political rights in an annual Freedom House survey of democracy. FREEDOM HOUSE, FREEDOM IN THE WORLD 2007, at 8–9, available at http://www.freedomhouse.org/uploads/press_release/fiwo7_charts.pdf.

³¹ See Nuclear Suppliers Group, Participants, <http://www.nuclearsuppliersgroup.org/member.htm> (last visited Apr. 6, 2007). Another international nonproliferation export control regime that excludes non-NPT parties is the Wassenaar Arrangement. See WASSENAAR ARRANGEMENT ON EXP. CONTROLS FOR CONVENTIONAL ARMS & DUAL-USE GOODS & TECHS., GUIDELINES & PROCEDURES, INCLUDING THE INITIAL ELEMENTS app. 4 (2006), available at <http://www.wassenaar.org/guidelines/GuidelinesDocs/Initial%20Elements.doc>.

dictably, the result has been that in the absence of NSG regulations and other nonproliferation obligations, some non-NPT nuclear states have irresponsibly shared sensitive technologies and secrets, thereby increasing the risk that critical nuclear materials will fall into the hands of rogue regimes or terrorists.³² More generally, the problem is that the all-or-nothing NPT approach of forcing states to disarm completely or become nuclear pariahs leaves a vacuum in which there is no institution or incentive structure governing states that decide that the value of retaining a nuclear arsenal outweighs the cost of noncompliance with the NPT. Consequently, non-NPT nuclear powers are left without sufficient obligations to implement the safeguards necessary to ensure that their nuclear materials and secrets do not fall into the wrong hands.³³

The decision not to extend the USIPAECA carrot of nuclear cooperation to states other than India despite this danger reflects a clear prioritization of deterring new proliferators over creating incentives for existing nuclear powers to behave responsibly. In the current security environment, this approach is likely justified. The United States has a vital interest in ensuring that no new states develop nuclear weapons; achieving this objective would not only reduce the likelihood that terrorists gain access to an atomic bomb, but also maintain the credibility of the threat that the United States will intervene to prevent aggressor states from using force against American allies.³⁴ Thus, Washington cannot risk the possibility that creating formal incentives for nuclear

³² For example, the head of the Pakistani nuclear program, A.Q. Khan, ran a “nuclear black market” providing centrifuge designs and other essential secrets to North Korea, Libya, Iran, and an undetermined number of other countries. William J. Broad & David E. Sanger, *As Nuclear Secrets Emerge, More Are Suspected*, N.Y. TIMES, Dec. 26, 2004, § 1, at 1; see also GlobalSecurity.org, A.Q. Khan, <http://www.globalsecurity.org/wmd/world/pakistan/khan.htm> (last visited Apr. 6, 2007).

³³ Some nonproliferation obligations may still apply to non-NPT nuclear powers. For example, in April 2004, the U.N. Security Council adopted Resolution 1540, which calls for states to pass legislation criminalizing proliferation, enact stricter export controls, avoid nuclear cooperation with nonstate actors, and secure nuclear materials. See S.C. Res. 1540, U.N. Doc. S/RES/1540 (Apr. 28, 2004); see also CLAIRE APPELGARTH & RHIANNA TYSON, ARMS CONTROL ASS’N, MAJOR PROPOSALS TO STRENGTHEN THE NUCLEAR NONPROLIFERATION TREATY II (2005), available at http://www.armscontrol.org/pdf/NPTRevConf2005_MajorProposals.pdf. However, the impact such measures have had on non-NPT nuclear weapons states remains unclear. For instance, at the time Resolution 1540 was adopted, Pakistan insisted that the document “did not seek to prescribe any specific legislation” at the national level. See *id.* Although it ultimately passed export control legislation in the face of increased pressure after the exposure of A.Q. Khan’s nuclear black market, Pakistan continues to refuse to hand Khan over to the United States or another nation for questioning. See *id.*

³⁴ The concern here is that a hostile regional power with nuclear weapons may believe that it can invade its neighbors and then deter American intervention in the local conflict by wielding nuclear threats.

pariahs might appear to legitimize their decision to violate the NPT and thereby convince other aspiring proliferators to do the same.

In the long run, however, the viability of this strategy depends on whether it succeeds in capping the number of nuclear powers at existing levels. Current international realities suggest that it might not. A number of experts have raised the possibility that a “cascade of proliferation” spurred by Iran and North Korea could collapse the nonproliferation regime and spawn a world of many nuclear powers.³⁵ For example, if Iran were to acquire a nuclear weapon, Egypt, Turkey, and Saudi Arabia might feel compelled to proliferate out of “fear or competitive emulation.”³⁶ Similarly, an expanded North Korean nuclear capability or a flare-up of regional rivalries in Asia could catalyze an arms race, leading countries like Japan and Taiwan to develop nuclear weapons.³⁷ Regardless of what triggers the cascade, as more countries develop nuclear weapons without undertaking nonproliferation obligations, it becomes easier for terrorists to obtain an atomic bomb.

Accordingly, as the number of non-NPT nuclear powers increases, Washington may consider extending formal incentives to ensure that new nuclear states behave responsibly and observe nonproliferation controls, even if doing so might confer legitimacy upon their decision to develop nuclear weapons in the first place. Before creating such incentives, however, the United States must define what it considers “responsible” conduct by a nuclear power and tailor its policy to induce such behavior. The USIPAECA can serve as a useful departure point for this inquiry. Its commitment to preventing states from intentionally or inadvertently supplying nuclear weapons to terrorists should be incorporated into any new code of nuclear responsibility in the form of stronger export controls and the implementation of best practices for securing nuclear materials from theft. Standing alone, however, the conditions outlined in the USIPAECA are inadequate to address all of the challenges of a “postproliferation world”³⁸ because the statute fails to move beyond export controls and concerns over nonstate actors to consider the fundamental transformations in the nature of relationships between states in a world of many nuclear powers.

Specifically, the USIPAECA fails to incentivize states to take measures that will mitigate the risks associated with nuclear crisis escalation. As a number of political science studies have concluded, intro-

³⁵ See, e.g., Graham Allison, *The Nightmare This Time*, BOSTON GLOBE, Mar. 12, 2006, at C1.

³⁶ Stephen Peter Rosen, *After Proliferation: What To Do If More States Go Nuclear*, FOREIGN AFF., Sept.–Oct. 2006, at 9, 9–10; see also Allison, *supra* note 35 (postulating that Egypt might obtain nuclear weapons if Iran does).

³⁷ See Rosen, *supra* note 36, at 11.

³⁸ *Id.* at 9.

ducing nuclear weapons into bilateral state relationships transforms international crises into contests of brinksmanship in which states signal their resolve and force opponents to back down through coercive economic, diplomatic, and military measures short of war.³⁹ Even if the threat of a devastating nuclear exchange compels states to avoid military conflict whenever possible, the potential for miscommunications, accidents, or other inadvertent actions to lead to nuclear war cannot be ignored.⁴⁰ Any attempt to define “responsible” conduct in a world of numerous nuclear powers should thus identify the types of state behaviors most conducive to inadvertent escalation or nuclear accidents and create incentives for states to avoid those behaviors during international crises. For example, the definition could compel states to maintain “tight and sustained civilian control”⁴¹ over nuclear arsenals, refrain from raising alert levels on nuclear forces, and separate weapons components from delivery systems.⁴² It could also specify confidence-building measures and other best practices to contain crisis escalation, such as mandatory hotlines between the heads of nuclear states. Though a full list of potential safeguards against crisis escalation or accidental nuclear use is well beyond the scope of this comment, the above discussion highlights the failure of the USIPAECA to include any such measures as prerequisites for obtaining nuclear cooperation.

All things considered, the USIPAECA reflects the United States’s choice to deter aspiring proliferators by not extending civil nuclear cooperation to non-NPT nuclear states other than India. However, a cascade of proliferation could compel a reversal of that policy. In that case, the United States would have to look beyond the USIPAECA criteria to incorporate measures that safeguard against crisis escalation and accidental nuclear use. For although the USIPAECA recognizes the theoretical need to address the risks posed by nuclear weapons states operating largely outside the obligations of the nonproliferation regime, its limited reach and incomplete definition of “responsible” nuclear conduct leave it incapable of tackling these dangers in practice.

³⁹ See, e.g., HERMAN KAHN, *ON ESCALATION* 39–93 (1965); GLENN H. SNYDER & PAUL DIESING, *CONFLICT AMONG NATIONS* 453–56 (1977). For a survey of the theoretical and empirical literature on this question, as well as a case study analysis demonstrating that states in nuclear crises exhibit risk-taking propensities that are greater than or equal to those of states in non-nuclear crises, see Neil Dipak Shah, *Risk, Restraint, and the Paradox of Nuclear Power: Assessing the Impact of Nuclear Weapons on State Behavior in International Crises* (Mar. 2003) (unpublished A.B. thesis, Harvard University) (on file with the Harvard University Archives).

⁴⁰ See Scott D. Sagan, *The Perils of Proliferation: Organization Theory, Deterrence Theory, and the Spread of Nuclear Weapons*, *INT’L SECURITY*, Spring 1994, at 66, 69–74.

⁴¹ *Id.* at 68.

⁴² *See id.* at 107.