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NOTES AND COMMENTS

PAKISTAN: A TEST CASE FOR UNITED STATES NONPROLIFERATION LAWS

Myron A. Brilliant*

INTRODUCTION

The United States has always supported international efforts to curb the spread of nuclear weapons.¹ The goal of the United States is to establish a comprehensive international strategy for addressing the problem of nuclear proliferation.² As current trends attest, however, it is difficult for the United States to apply this broad objective in isolated situations.³

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1. Scheinman, *An Evaluation of Non-Proliferation Policies: Retrospect and Prospect*, 4 N.Y.L. SCH. J. INT'L & COMP. L. 355, 355 (1983). A central theme in United States security and foreign policy is the avoidance of the spread of nuclear weapons. *Id.*; e.g., NUCLEAR PROLIFERATION: PROSPECTS FOR CONTROL 131-32 (B. Boskey & M. Willrich eds. 1970) (explaining that the United States supports a general non-proliferation treaty); G. QUESTER, THE POLITICS OF NUCLEAR PROLIFERATION 28-32 (1973) (expressing the concern of the United States to control nuclear weapons). The major international efforts to prohibit the use of nuclear weapons include the following: Statute of the International Atomic Energy Agency, Oct. 26, 1956, 8 U.S.T. 1093, T.I.A.S. No. 3873, 276 U.N.T.S. 3 (entered into force for the United States on July 29, 1954); the Antarctic Treaty, 12 U.S.T. 794, T.I.A.S. No. 4789, 402 U.N.T.S. 71 (entered into force on June 23, 1986); the Test Ban Treaty, 14 U.S.T. 1313, T.I.A.S. No. 5433, 480 U.N.T.S. 43 (entered into force on Oct. 10, 1963); Treaty for the Prohibition of Nuclear Weapons in Latin America, Feb. 14, 1967, 22 U.S.T. 347, T.I.A.S. No. 7137, 634 U.N.T.S. 281; Treaty on the Non-Proliferation of Nuclear Weapons, 21 U.S.T. 483, T.I.A.S. No. 6839, 729 U.N.T.S. 161 (signed in Washington, London, and Moscow on July 1, 1968) [hereinafter NPT]. The United States is a signatory of all of these major international agreements.

2. See Stoiber, *Current United States Nuclear Non-Proliferation Policy*, 4 N.Y.L. SCH. J. INT'L & COMP. L. 367, 368 (1983) (explaining that an important United States policy objective is to strengthen and support international nonproliferation instruments). *But see* Scheinman, *supra* note 1, at 356 (stating that the Reagan administration's strategy for achieving nonproliferation goals has shifted away from a comprehensive global strategy toward a more selective and discriminatory approach).

3. Yager, *Influencing Incentives and Capabilities*, in NON-PROLIFERATION AND U.S. FOREIGN POLICY 407 (J. Yager ed. 1980) [hereinafter Yager, *Incentives and Ca-*

The development of independent indigenous nuclear programs⁴ in high risk countries⁵ best illustrates the inherent limitations of international nonproliferation efforts. These countries, for a variety of economic, political, and national security reasons,⁶ are currently pursuing nuclear weapons capability. The restraints once associated with developing nuclear weapons no longer effectively deter these states, therefore

pabilities]. The United States nonproliferation objectives are adjusted to particular countries and may create too much differentiation among countries and thus be viewed as unjust discrimination. See generally Note, *Nuclear Non-Proliferation for the 80s: Carrot and Stick Policy Reexamined*, 13 BROOKLYN J. INT'L L. 25, 41-52 (1987) [hereinafter *Carrot and Stick Policy*] (discussing the sharp conflict between United States nonproliferation goals and the nonproliferation goals of Pakistan and South Africa).

4. *Carrot and Stick Policy*, *supra* note 3, at 33 n.62. Indigenous nuclear facilities are those created entirely by the state and do not depend on nuclear assistance from other nations. *Id.* These programs generally develop at a slow pace. D. PONEMAN, *NUCLEAR POWER IN THE DEVELOPING WORLD* 51 (1982). Independent atomic energy efforts, usually of the highest governmental priority often generate intense press interest and vociferous assertions of independence by national leaders. *Id.* at 49-51.

5. Ausness, *Putting the Genie Back in the Bottle: U.S. Controls Over Sensitive Nuclear Technology*, 16 GEO. WASH. J. INT'L L. & ECON. 65, 70-71 (1981). "High risk" countries are those countries that represent a problem for nuclear nonproliferation efforts because they are on the verge of acquiring nuclear capability. *Id.* Most of these "high risk" countries face major foreign challenges or internal domestic challenges which affect their stability. *Id.*; see also Merlini, *Problem Countries*, in *THE NUCLEAR SUPPLIERS AND NON-PROLIFERATION* 155 (1985) (outlining the general characteristics of current and potential problem countries that pose a threat to nuclear nonproliferation). Countries that display an open determination to acquire nuclear weapons, that are not parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and that consistently develop sensitive nuclear technologies, are considered current high risk countries. *Id.*

6. Comment, *Prospects for Nuclear Proliferation and Its Control*, 6 DEN. J. INT'L L. & POL'Y 159, 169 (1976) [hereinafter *Prospects for Nuclear Proliferation*]. The most prominent factors to foster the development of nuclear explosion capabilities in non-nuclear states are: (1) the need to maintain or increase security; (2) the desire for greater international prestige; and (3) the need for independent energy sources. *Id.* at 177-79. Countries may use peaceful nuclear explosives in excavating procedures, stimulating natural gas recovery, and creating underground caverns for oil and gas storage. Long, *Peaceful Nuclear Explosions*, 32 BULL. ATOM. SCI., 18, 21-26 (1976).

The main political consideration is the desire to enhance prestige and influence. *Prospects for Nuclear Proliferation*, *supra*, at 175-77. The possession of nuclear weapons guarantees a country greater independence by preventing to some degree superpower interference in its affairs. STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE: PREVENTING NUCLEAR WEAPON PROLIFERATION 7 (1975) [hereinafter SIPRI: PREVENTING PROLIFERATION]. By becoming nuclear powers, The People's Republic of China and India gained influence, prestige, and a degree of political independence. Epstein, *The Proliferation of Nuclear Weapons*, SCI. AM., Apr. 1975, at 18, 22.

The most important consideration, however, in the development of nuclear weapons is national security. Ausness, *supra* note 5, at 69. The acquisition of nuclear weapons is perceived as providing security against a nuclear attack as well as against an attack by conventional forces. *Id.* Nuclear weapons can also enable smaller countries to gain military superiority in their regions. W. EPSTEIN, *THE LAST CHANCE: NUCLEAR PROLIFERATION & ARMS CONTROL* 19 (1976).

international efforts to curb wider dissemination of nuclear weapons have become increasingly more difficult.⁷

Pakistan exemplifies the limitations of international nonproliferation efforts. A non-nuclear state on the verge of becoming a nuclear state,⁸ Pakistan is considered a high risk country.⁹ Its nuclear policy is not governed by international nonproliferation treaties.¹⁰ Despite international efforts to slow the spread of nuclear weapons, Pakistan continues to acquire valuable nuclear technology and materials.¹¹ Pakistan provides an important test case for United States nonproliferation policies.

While United States-Pakistan relations appeared to improve during the 1980s, Pakistan continued acquiring nuclear weapon capability.¹²

7. SIPRI: PREVENTING PROLIFERATION, *supra* note 6, at 7. The cost of building a nuclear weapons program and the lack of technological expertise are no longer effective barriers to prevent nations from acquiring nuclear weapons. *Id.* Other significant limitations in the implementation of an effective international nonproliferation policy are that non-military nuclear energy can be converted to military use; that international law cannot compel nations to comply with nuclear regulations; and that nuclear nonproliferation treaties tend to discriminate against non-nuclear states. *Carrot and Stick Policy*, *supra* note 3, at 37. See SIPRI: PREVENTING PROLIFERATION, *supra* note 6, at 5 (describing that cost and technical expertise are no longer barriers to prevent nations from acquiring nuclear weapons). The NPT is difficult to maintain because of the varying political and security interests of so many countries. *Id.*

8. L. SPECTOR, *THE NEW NUCLEAR NATIONS*, 113 (1985) [hereinafter SPECTOR, *NUCLEAR NATIONS*]; Albright, *Pakistan's Bomb-Making Capacity*, 43 *BULL. ATOM. SCI.* 30 (1987); Doerner, *Knocking at the Nuclear Door*, *TIME*, Mar. 30, 1987, at 42.

9. Ausness, *supra* note 5, at 70 (noting that Pakistan has refused to sign the Nuclear Non-Proliferation Treaty). See Merlini, *supra* note 5, at 162 (citing evidence that implicates Pakistan as a current proliferation risk).

10. *Carrot and Stick Policy*, *supra* note 3, at 41. Because Pakistan has not signed the NPT, it is under no legal duty to refrain from developing nuclear weapons. Ausness, *supra* note 5, at 70.

Pakistan's nuclear diplomacy suggests a willingness to cooperate with international nonproliferation treaties and obligations when India agrees to international treaties and obligations. *INSTITUTE OF REGIONAL STUDIES, ISLAMABAD, NO BOMBS IN SOUTH ASIA, REGIONAL PERSPECTIVE*, May 1987. Until India signs the NPT, however, Pakistan will remain uncommitted to its principles as well. Jones, *Nuclear Supply Policy and South Asia*, *NUCLEAR SUPPLIERS AND NONPROLIFERATION*, 172 (Jones ed. 1985). Pakistan exemplifies the intrinsic problems of a comprehensive nonproliferation strategy while it remains outside international controls. *Carrot and Stick Policy*, *supra* note 3, at 18. *But see* Rais, *Pakistan's Nuclear Program: Prospects for Proliferation*, 25 *ASIAN SURV.* 458, 458 (1985) (stating that the contemporary nonproliferation efforts present a number of serious technological, economic, political, and strategic restraints limiting Pakistan's option to acquire nuclear weapons).

11. Note, *The Proliferation of Nuclear Reactors*, 20 *J. WORLD TRADE L.* 99, 105 (1986). With Libyan money purchased on the gray market and through dummy companies set up in Western countries, Pakistan has bought equipment for its uranium enrichment plant. *Id.*; see also Khalilzad, *Pakistan and the Bomb*, 36 *BULL. ATOM. SCI.* 11, 13 (1980) (discussing the secret attempt of Pakistan to acquire a uranium enrichment plant to process weapon-quality material).

12. See *infra* notes 149-56 and accompanying text (discussing the warmer United States-Pakistan relations since the Soviet invasion of Afghanistan in 1979).

Unfortunately, the Reagan administration did not place much emphasis on reducing the incentive for Pakistan to develop nuclear weapons. For example, the administration failed to exercise any economic leverage over Pakistan prior to approving its aid packages to that country.¹³ In so doing, the United States failed to extract important concessions that could have significantly reduced the ability of Pakistan to develop its own nuclear arsenal.¹⁴ Throughout the Reagan administration, other foreign policy objectives have taken priority over the effort to limit the prospects for proliferation in South Asia.¹⁵

A stronger United States commitment to nonproliferation objectives is crucial. The recent attempt of Pakistan to illegally acquire nuclear materials within the United States, in direct violation of United States nonproliferation laws,¹⁶ raised serious concerns over the future direction of the nuclear program in Pakistan. Due to heightened suspicion of Pakistani attempts to develop a nuclear weapon, the United States has considered punitive action, in particular the elimination of United States economic and military aid to Pakistan.¹⁷

This Comment examines why the United States nonproliferation policy fails to establish an effective strategy for dealing with potential proliferants. Part I of this Comment traces the history of nuclear nonproliferation policies in the international arena, in the United States, and in Pakistan. Part II examines the Reagan administration non-

13. Cross & Smith, *The Reagan Administration's Nonproliferation Nonpolicy* 33 CATH. U.L. REV. 633, 657 (1984). The Reagan administration claims that expanded aid has given increased influence over the nuclear program in Pakistan. *Id.* Using aid as a lever implies a willingness on the part of the United States to withdraw assistance to enforce its nonproliferation objectives. *Id.* This willingness, however, is missing in Reagan's administration. *Id.*

14. *Id.* at 659.

15. *Id.* at 657. Under this administration, nonproliferation objectives are superceded by concerns regarding the perceived Soviet threat in South Asia. *See infra* notes 148-54 and accompanying text (discussing how the Soviet invasion of Afghanistan in 1979 changed United States foreign policy objectives in South Asia).

16. Rosenfeld, *Pakistan's Nuclear Insurance*, Wash. Post, July 31, 1987 at A23 [hereinafter *Pakistan's Nuclear Insurance*]; Oberdorfer, *U.S. Asks Pakistan to Stop Producing Bomb-Grade Uranium*, Wash. Post, July 23, 1987 at A37 [hereinafter *U.S. Asks Pakistan to Stop Producing*]; Weintraub, *Pakistan Faces Woes From Within, Without*, Wash. Post, July 23, 1987 at A10 [hereinafter *Pakistan Faces Woes*]. Because of recent allegations that Pakistan was involved in an attempt to acquire nuclear-related material from the United States, the Reagan administration has told Pakistan that it must act to avoid an aid cutoff. Oberdorfer, *U.S. Says Pakistan Must Act to Avoid Aid Cutoff Over Nuclear-Export Case*, Wash. Post, July 17, 1987 at A22 [hereinafter *Pakistan Must Act*]. *See infra* notes 162-68 and accompanying text (discussing the recent arrest of Arshad A. Pervez and its impact on United States-Pakistan diplomatic relations).

17. Shipler, *U.S. Presses Pakistan on Atom Plants*, N.Y. Times, Sept. 22, 1987 at A15; *Pakistan Must Act*, *supra* note 16, at A22.

proliferation strategy toward Pakistan. This section analyzes United States-Pakistan tensions and evaluates whether the United States should invoke punitive sanctions against Pakistan. Part III proposes a solution to the tensions and examines long-term prospects for halting a nuclear arms race in South Asia.

I. HISTORICAL BACKGROUND

A. INTERNATIONAL CONTEXT

The history of legal nonproliferation efforts is comprised of three distinct phases. The first phase, or the period of secrecy, began with the close of the Second World War.¹⁸ The second phase, the "Atoms for Peace" era, occurred during the Eisenhower administration.¹⁹ The third phase, the era of containment, which followed the signing of the Nuclear Non-Proliferation Treaty (NPT) in 1968, characterizes United States nonproliferation policy today.²⁰

1. *The Period of Secrecy*

The first efforts to contain nuclear proliferation took place immediately following the end of World War II.²¹ During this period, which lasted until 1954, the United States struggled to maintain its monopoly over nuclear technology and instituted a foreign relations policy that sought to deny other nations access to nuclear technology.²² The United States promulgated proposals for international supervision of nuclear activities and materials in order to control proliferation.²³ The Soviet

18. See *infra* notes 21-26 and accompanying text (discussing the period of secrecy).

19. See *infra* notes 27-35 and accompanying text (describing the "Atoms for Peace" era).

20. See *infra* notes 36-60 and accompanying text (discussing current trends in United States nonproliferation policy).

21. Ausness, *supra* note 5, at 66; Edwards, *International Legal Aspects of Safeguards and the Non-Proliferation of Nuclear Weapons*, 33 INT'L & COMP. L. Q. 1, 2 (1984); Firmage, *Anarchy or Order? The Nth Country Problem and the International Rule of Law*, 29 MO. L. REV. 138, 142-44 (1964).

22. Ausness, *supra* note 5, at 66; R. BECKMAN, NUCLEAR NON-PROLIFERATION, 13-49 (1985); Scheinman, *supra* note 1, at 355. Nuclear weapons has preoccupied United States security and foreign policy matters since the advent of nuclear arms. *Id.*

23. Edwards, *supra* note 21, at 2. In both the Acheson-Lilienthal Report of 1945 and the Baruch Plan of 1946, the United States advocated international control of nuclear materials. REPORT ON THE INTERNATIONAL CONTROL OF ATOMIC ENERGY, U.S. STATE DEPARTMENT PUBLICATION 2498, Mar. 1946. *Carrot and Stick Policy*, *supra* note 3, at 29. The Acheson-Lilienthal Report of 1946 was co-authored by Secretary of State Dean Acheson and Tennessee Valley Authority Chairman David Lilienthal. *Id.* The plan proposed to implement extensive international controls over all nuclear materials to ensure the development of peaceful nuclear programs. *Id.* Accordingly, it advocated the establishment of an international supervisory organiza-

Union together with other nations, however, rejected these proposals.²⁴ Their rejection led the United States to adopt strict controls over its nuclear materials, including a prohibition on the exchange of scientific nuclear technology, that was enunciated in the Atomic Energy Act of 1946.²⁵ In spite of the Act, United States efforts to exercise strict control of the export of nuclear technology did not prevent other nations from acquiring nuclear weapons capability.²⁶

2. The "Atoms for Peace" Era

In 1953, President Eisenhower inaugurated the most significant era in international and United States nuclear containment policy with his famous "Atoms for Peace" speech before the United Nations General Assembly.²⁷ Eisenhower's speech outlined a new approach to proliferation and proposed that nuclear states share the peaceful uses of nuclear energy with non-nuclear states.²⁸ Under this plan, the United States

tion. *Id.* J. YAGER, INTERNATIONAL COOPERATION IN NUCLEAR ENERGY, 146-48 (1981) [hereinafter *Improving Int'l Nuclear Regime*].

The Plan was motivated by a desire to eliminate competition among states developing nuclear weapons. Cross & Smith, *supra* note 13, at 635. The plan called for cooperative international development of nuclear energy. Under this plan, all phases of developing and using nuclear energy would be supervised by a United Nations commission. Edwards, *supra* note 21, at 3.

24. Cross & Smith, *supra* note 13, at 635. Mutual feelings of secrecy and suspicion developed in the international community, which were brought on by United States efforts to hold on to its short-lived monopoly. *Carrot and Stick Policy*, *supra* note 3, at 29; see also *Nuclear Proliferation: Future U.S. Foreign Policy Implications: Hearings before the Subcomm. on International Relations, 94th Cong., 1st Sess.* 244 (1975) (statement of Myron B. Kratzer).

25. The Atomic Energy Act of 1946, Pub. L. No. 79-585, 60 Stat. 755 (1946); The Atomic Energy Act of 1954, Pub. L. No. 83-703, 68 Stat. 919 (codified at 42 U.S.C. §§ 2011-2096 (1976)). The Atomic Energy Act of 1946 prohibited the United States from shipping weapons-quality materials and prohibited the United States from exchanging scientific nuclear technology to other nations. Comment, *United States Controls Over Exports of Weapons-Grade Uranium*, 23 B.U. INT'L L. J. 449, 454 (1984) [hereinafter *United States Controls*]. The act was premised on the belief that the prevention of nuclear cooperation would prevent the spread of nuclear weapons. *Id.* at 455; BRENNER, NUCLEAR POWER AND NON-PROLIFERATION 2 (1981). See also BECKMAN, *supra* note 22, at 37 (stating that the Act did not deal with difficult issues of international control because the United States anticipated the passage of an international regulatory scheme).

26. Ausness, *supra* note 5, at 66; Cross & Smith, *supra* note 13, at 635. United States controls did not prevent the Soviet Union, Great Britain, and France from rapidly developing nuclear capability. *Id.*

27. "Atoms For Peace Speech," 8 U.N. GAOR (470th Mtg.) at 79-126, U.N. Doc. A/PV.470, (Dec. 8, 1953). See Yeager, *Improving Int'l Regime*, *supra* note 23, at 149 (stating that this speech marked the beginning of a fundamental shift in United States foreign policy).

28. Cross & Smith, *supra* note 13, at 635. Under this plan, the United States would assist non-nuclear states in developing peaceful nuclear programs. *Id.* The

would end the policy of secrecy and restraint mandated in the Atomic Energy Act of 1946.²⁹

This new policy of the United States initiated the era of international cooperation.³⁰ Pursuant to the "Atoms for Peace" plan, the United States enacted the Atomic Energy Act of 1954,³¹ helped establish the International Atomic Energy Act (IAEA),³² and entered into numerous

speech also proposed that an International Atomic Energy Agency be established to encourage the peaceful use of nuclear energy and to play an instrumental role in controlling the transfers of nuclear materials. Edwards, *supra* note 21, at 3. *But cf.* Bauser, *United States Nuclear Export Policy: Developing the Peaceful Atom as a Commodity in International Trade*, 18 HARV. INT'L L. J. 227, 228 n.3 (1977) (stating that the United States did not take the lead in the development and export of nuclear power facilities to non-nuclear states, as is commonly believed). The British sold the first two nuclear power reactors in international commerce to Japan and Italy. *Id.*

29. Cross & Smith, *supra* note 13, at 635; Yeager, *Improving Int'l Regime*, *supra* note 23, at 149; *see also* THE HARVARD STUDY GROUP, *LIVING WITH NUCLEAR WEAPONS* 225 (1983) [hereinafter THE HARVARD STUDY GROUP] (stating that President Eisenhower's "Atoms for Peace" plan pledged United States nuclear technological assistance to those nations which promised, in return, not to use the assistance for military purposes).

30. Cross & Smith, *supra* note 13, at 635.

31. Atomic Energy Act of 1954, 42 U.S.C. § 2011-2296 (1982). The Atomic Energy Act stated that the basic policy of the United States was to encourage cooperation between the United States and other nations trying to develop nuclear energy. *Id.* § 2011. The AEA also established conditions for nuclear cooperation regarding the transport of nuclear equipment and materials. Krauland, *NEPA, Nukes and Non-Proliferation: Clarifying the Transnational Impact Statement Mandate in Nuclear Export Licensing*, 4 HASTINGS INT'L & COMP. L. REV. 201, 208 (1981). Under the Act, nuclear trade is permissible after the United States and the importing nations executed an agreement for cooperation. Atomic Energy Act of 1954, 42 U.S.C. § 2153 (1982); *United States Controls*, *supra* note 25, at 455. The agreements for cooperation include the following specific guidelines: (1) the terms, conditions, scope, and duration of the agreement; (2) agreement of the recipient party security safeguards as set forth in the guidelines; (3) the agreement of the recipient party to the prohibited use of the materials for atomic weapons; and (4) the capitulation of the recipient not to transfer the materials to unauthorized persons. Atomic Energy Act of 1954, 42 U.S.C. § 2153 (1982).

32. Statute of the International Atomic Energy Agency, *supra* note 1. The chief goals of the IAEA were to promote development of civilian nuclear energy and to establish international safeguards against the potential misuse of nuclear technology for military purposes. Edwards, *supra* note 21, at 3. Under the statute, the important functions of the IAEA with regard to nuclear activities are (1) to encourage and assist, and perhaps carry out research; (2) to receive and provide materials, services, equipment, and facilities; (3) to encourage the interchange of scientific and technical expertise; (4) to encourage the exchange and training of scientific experts; (5) to develop and apply safeguards to prevent diversion to military use of nuclear items furnished for or pledged to peaceful purposes; and (6) to establish, ratify, and apply health and safety standards and measures. Statute of the International Atomic Agency, *supra* note 1, at art. III; P. SZASZ, *THE LAW AND PRACTICES OF THE INTERNATIONAL ATOMIC ENERGY AGENCY* 351 (1970). From its inception, the IAEA has served as a diplomatic channel for nations attempting to formulate agreements committed to maintaining peaceful nuclear programs. Note, *Protecting Nuclear Materials in the Terrorist Age: The International Challenge*, 12 BROOKLYN J. INT'L L. 307, 319 (1986) [hereinafter *Protecting*

bilateral agreements for cooperation.³³ This new attitude toward nuclear energy was premised on the general belief that exchanging the peaceful benefits of the atom would prevent non-nuclear states from establishing independent nuclear programs.³⁴ In the 1950s, an international regulatory system emerged that instituted rules and procedures designed to handle a potentially dangerous novel energy source.³⁵

3. *The Nuclear Non-Proliferation Treaty and Its Implications for Non-Proliferation*

The Nuclear Non-Proliferation Treaty (NPT),³⁶ signed in 1968, is the primary international agreement for the prevention of the spread of nuclear weapons.³⁷ Under the terms of this multilateral treaty, the con-

Nuclear Materials].

33. Cross & Smith, *supra* note 13, at 635; Yager, *Improving Int'l Regime*, *supra* note 23, at 150. As early as 1955, the United States had executed bilateral agreements with 27 countries. *Id.* A common aspect of all early agreements on international nuclear cooperation was promises against the transfer of nuclear materials to third parties. *Id.*

34. Smith, *Nuclear Arms Control and Disarmament*, 4 N.Y.L. SCH. J. INT'L & COMP. L. 345, 347 (1983); see *Protecting Nuclear Materials*, *supra* note 32, at 317-18 (stating that the NPT has checked non-nuclear weapon states from independently developing nuclear weaponry); *Carrot and Stick Policy*, *supra* note 3, at 30 (asserting that sharing nuclear technology removes incentives for non-nuclear states to develop nuclear programs); *Nuclear Proliferation Hearings*, *supra* note 24, at 244 (stating that through the new policy, non-nuclear states could benefit from atomic power without establishing their own nuclear programs, which might lead to the development of nuclear weapons), see also THE HARVARD STUDY GROUP, *supra* note 29, at 226-27 (discussing the NPT as central to modern-day nonproliferation efforts).

35. Scheinman, *supra* note 1, at 357-58. In this era, three basic beliefs were formed: (1) that nuclear proliferation was not beneficial for every state and rather than enhancing security, the acquisition of nuclear weapons could possibly reduce security and increase instability; (2) that nuclear energy has an important part to play in, and can make a significant contribution to, national energy development; (3) that the development of an international system designed to establish appropriate terms and conditions for cooperation can alleviate identifiable risks associated with the spread of nuclear technology; and (4) that this international system will facilitate the widespread access to nuclear energy without substantially increasing the risk of nuclear weapons proliferation. *Id.* at 358.

36. NPT, *supra* note 1. A majority of Western, Socialist, and developing countries have signed the Treaty, including Afghanistan, Australia, Austria, Belgium, Bolivia, Bulgaria, Cameroon, Canada, Colombia, Congo, Costa Rica, Czechoslovakia, Denmark, Dominican Republic, Egypt, El Salvador, Ethiopia, Finland, German Democratic Republic, Federal Republic of Germany, Morocco, The Netherlands, New Zealand, Nicaragua, Norway, Paraguay, Peru, Romania, Singapore, Sri Lanka, Sweden, Switzerland, Tunisia, Turkey, Soviet Union, United Kingdom, United States, Venezuela, Yugoslavia, Zaire, and Taiwan; see UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY, ARMS CONTROL & DISARMAMENT AGREEMENTS 96-98 (1984) [hereinafter ARMS CONTROL] (listing the signatory nations).

37. Ausness, *supra* note 5, at 87. See *Carrot and Stick Policy*, *supra* note 3, at 33 (stating that the NPT dramatically curtailed nuclear proliferation); *Protecting Nuclear*

tracting parties agree to cooperate in facilitating the fullest possible exchange of nuclear technological information for the peaceful uses of nuclear energy³⁸ and to control the spread of nuclear weapons.³⁹ The NPT is widely accepted, and it is therefore an important step toward regulating the development of peaceful nuclear programs around the world.⁴⁰

The NPT attempts to minimize the risks of a dangerous international nuclear arms race through various measures.⁴¹ For example, the NPT prohibits the transfer of nuclear technology, equipment, or nuclear material (such as uranium or plutonium) to any non-nuclear weapon⁴² nation without international safeguards.⁴³ These safeguards

Materials, supra note 32, at 317 (discussing how the NPT hindered both the growth of nuclear weaponry and the acquisition of nuclear materials). The impetus behind the NPT was the hope that an international agreement on nonproliferation would reduce international tensions and thus prevent a dangerous multilateral nuclear arms race. *Prospects for Nuclear Proliferation, supra* note 6, at 159-60.

38. NPT, *supra* note 1, art. IV § 2. Article IV, section 2 states:

All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials, and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also co-operate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world.

Id.

39. NPT, *supra* note 1, art. I and II. Articles I and II contain the basic provisions prohibiting the spread of nuclear weapons. *Id.* Article I directly defines the obligations of a nuclear-weapon state party to the Treaty. *Id.* art. I. Article I states:

Each nuclear-weapon State Party to the treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

Id. Article II outlines the obligations of a non-nuclear-weapon state party to the treaty.

Id. art. II. Article II states:

Each non-nuclear weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

Id. Nuclear-weapon states which are not parties to the Treaty, however, can transfer nuclear weapons to other nations. Ausness, *supra* note 5, at 88 n. 147.

40. *Carrot and Stick Policy, supra* note 3, at 32-33. By 1984, 97 countries had signed the NPT; see ARMS CONTROL, *supra* note 36, at 96-98 (listing countries that have signed the NPT).

41. *Prospects for Nuclear Proliferation, supra* note 6, at 159-60.

42. See *id.* at 160 n.4 (explaining that the NPT does not define a nuclear weapon nation or a non-nuclear weapon nation). A nuclear-weapon nation is one which either

are designed to prevent the transfer of nuclear technology or material to nations intending to divert assistance to nonpeaceful uses.⁴⁴ In a further attempt to control proliferation, the Treaty requires each non-nuclear weapon state to accept international safeguards on all its peaceful nuclear facilities.⁴⁵

In addition, under the NPT, nuclear weapon states are encouraged to make available, under appropriate international procedures, peaceful nuclear explosives to non-nuclear weapon states on a nondiscriminatory basis.⁴⁶ Nuclear weapon states are also directed to pursue measures in

possesses nuclear weapons or a nuclear explosion capability (or both), and a non-nuclear weapon nation possesses neither. *Id.*

43. NPT, *supra* note 1, art. III § (2). Article III, section 2 states:

Each State Party to the Treaty undertakes not to provide: (a) source of special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this Article.

Id.

44. Edwards, *supra* note 21, at 10; see *Prospects for Nuclear Proliferation*, *supra* note 6, at 160 (outlining the goals of the NPT); *But see* W. PATTERSON, *THE PLUTONIUM BUSINESS AND THE SPREAD OF THE BOMB*, 35-36 (1984) [hereinafter *THE PLUTONIUM BUSINESS*] (stating that because the NPT gave non-signatory states a competitive advantage in the nuclear materials market, signatory states ignore the safeguard requirements promulgated for the sale of nuclear materials).

45. NPT, *supra* note 1, art. III § (1). Article III section 1 states:

Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguard system, for the exclusive purpose of verification of the fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Procedures for the safeguards required by this article shall be followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this Article shall be applied on all source or special fissionable material in all peaceful nuclear facilities within the territory of such state, under its jurisdiction, or carried out under its control anywhere.

Id.

46. NPT, *supra* note 1, art. V. Article V states:

Each Party to the Treaty undertakes to take appropriate measures to ensure that, in accordance with this Treaty, under appropriate international observation and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear weapon states Party to the Treaty on a non-discriminatory basis and that the charge to such Parties for the explosive devices used will be as low as possible and exclude any charge for research and development. Non-nuclear-weapon States Party to the treaty shall be able to obtain such benefits pursuant to a special international agreement or agreements, through an appropriate international body with adequate representation of non-nuclear weapon states. Negotiations on this subject shall commence as soon as possible after the Treaty enters into force. Non-nuclear-weapon States Party to the Treaty so desiring may also

good faith that are aimed at reducing their own nuclear arsenal.⁴⁷ In sum, the Treaty encourages the development of peaceful nuclear energy, and, simultaneously, tries to establish strict control over nuclear weapon proliferation.⁴⁸

Many problems, however, hinder the application of the NPT. The NPT contains several loopholes through which a non-nuclear party to the NPT can acquire the technology and materials necessary to develop nuclear weapons.⁴⁹ For example, under the Treaty, non-nuclear states can acquire nuclear facilities for peaceful purposes that are not expressly specified in the Treaty.⁵⁰ While the Treaty governs the transfer of nuclear technology, it does not cover the subsequent development of that nuclear technology.⁵¹

In addition, the refusal of several important nations to sign the NPT reduces its effectiveness.⁵² In many ways, the Treaty is considered politically unacceptable to these countries, that regard its intent as both

obtain such benefits pursuant to bilateral agreements.

Id.

47. NPT, *supra* note 1, art. VI. Article VI states:

"Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."

Id.

48. *Prospects for Nuclear Proliferation*, *supra* note 6, at 162; Ausness, *supra* note 5, at 87-90. The NPT attempts to balance the concerns of the nuclear states over the spread of nuclear weapons and the political, military, and economic concerns of the non-nuclear nations. *Id.* at 87.

49. *Prospects for Nuclear Proliferation*, *supra* note 6, at 163-64.

50. *Carrot and Stick Policy*, *supra* note 3, at 33; Bettauer, *The Nuclear Non-Proliferation Act of 1978*, 10 L. & POL'Y INT'L BUS. 1103, 1137 (1978). The chief example of illegal applications is the conversion of nuclear materials for military purposes. *Id.*; see also *Prospects for Nuclear Proliferation*, *supra* note 6, at 163 (stating that purchased nuclear facilities can be studied and replicated). Brazil, a non-party nation, purchased the technology for a complete nuclear cycle from the Federal Republic of Germany. *Id.* at 163 n.20. This technology provides an ideal teaching tool for the nuclear program in Brazil. *Id.*

51. *Prospects for Nuclear Proliferation*, *supra* note 6, at 164. The NPT does not prevent non-signatory states from pursuing independent, indigenous nuclear programs. *Carrot and Stick Policy*, *supra* note 3, at 33.

52. Ausness, *supra* note 5, at 90; *Prospects for Nuclear Proliferation*, *supra* note 6, at 166. Important countries that have refused to sign or ratify the NPT include: Argentina, Brazil, Burma, Chile, China, Cuba, Guinea, France, Guyana, India, Israel, North Korea, Monaco, Niger, Pakistan, Portugal, Saudi Arabia, Spain, South Africa, Tanzania, Turkey, and Zambia. L. SPECTOR, NUCLEAR PROLIFERATION TODAY 441 (1984) [hereinafter SPECTOR TODAY]. The United States has nuclear agreements with several nations that are not parties to the NPT even though these nations may choose to ignore international safeguards. *Id.* Currently, the United States has agreements for peaceful nuclear cooperation with Argentina, Brazil, India, Indonesia, South Africa, Spain, and Turkey. Bettauer, *supra* note 50, at 1137. These states have not signed the NPT. *Id.*

discriminatory and perpetuating nuclear monopoly.⁵³ Most of these non-party states are located in unstable regions where severe security problems exist.⁵⁴ Security pressures provide the major impetus behind decisions to acquire nuclear weapons capability.⁵⁵ Because the Treaty cannot provide security guarantees to non-nuclear states,⁵⁶ many high risk nations elect to retain their nuclear option.⁵⁷

In spite of these limitations, however, the Treaty establishes some important international norms of behavior in the nuclear field.⁵⁸ The goal of nonproliferation enunciated in the Treaty should extend to all

53. Silverstein, *Sharing United States Energy and Technology with Less-Developed Countries: A Model for International Technology Transfer*, 12 J. INT'L L. & ECON. 363, 378 (1978); Ausness, *supra* note 5, at 90. For example, while the NPT permits nuclear states to have nuclear weapons, non-nuclear states must forego nuclear weapons completely. *Id.* In addition, nuclear states have no obligation to submit to the international safeguards to which non-nuclear states must submit. *Id.* The Soviet Union is an example of a nuclear-weapon state that refuses to permit IAEA inspections of its civilian nuclear facilities. *Id.* at 90 n.165.

54. *Prospects for Nuclear Proliferation*, *supra* note 6, at 166. Among these regional rival pairs are countries such as Israel and Egypt, India and Pakistan, Brazil, and Argentina. *Id.*

55. *Id.* at 166; *see supra* note 6 and accompanying text (explaining that a nation concerned with its security may seek to acquire nuclear weapons).

56. Ausness, *supra* note 5, at 90; Ehrlich, *The Nonproliferation Treaty and Peaceful Uses of Nuclear Explosives*, 96 VA. L. REV. 587, 600 (1970). The United States objected to incorporating security guarantees in the NPT. Comment, *Legal Implications of Indian Nuclear Development*, 4 DEN. J. INT'L L. & POL'Y 237, 250 (1974). The United Nations Security Council, however, has adopted a resolution on "security assurances" intended to protect non-nuclear weapon parties from acts or threats of aggression with nuclear weapons. Ausness, *supra* note 5, at 90. The United States, Great Britain, and the Soviet Union have pledged to provide immediate assistance to any country attacked by a nuclear weapon. *Id.*

57. Ausness, *supra* note 5, at 90. From a security standpoint, to increase the prospects for nonproliferation, short-term security assurances and long-term substantive changes must be made to non-nuclear states to help eliminate the perceived threat of nuclear attack. *See Prospects for Nuclear Proliferation*, *supra* note 6, at 170-75 (discussing ways to reduce the perceived threat of nuclear attack).

From a political standpoint, reducing the discrimination against non-nuclear nations caused by the NPT can diminish the value of nuclear weapons. *Id.* at 176-77. The discrimination in NPT obligations and in nuclear opportunities must be reduced. *Id.*

The discriminatory nature of the NPT also extends to future economic benefits. *Id.* at 178. Among the most popular measures suggested to reduce the economic pressures for nuclear proliferation are: (1) to form a comprehensive nuclear technology and material suppliers cartel; and (2) to provide the preferential treatment to non-nuclear NPT-party nations promised by nuclear nations. *Id.* at 180.

58. TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS, ARMS CONTROL AND DISARMAMENT AGREEMENTS 88-89 (1982 ed.). Since the implementation of the Treaty: (1) no nuclear weapon state party to the Treaty has transferred nuclear weapons to any non-nuclear weapon state; (2) no non-nuclear weapon state party to the Treaty has acquired a nuclear weapon; (3) the IAEA has developed an extensive system of safeguards; (4) safeguard agreements have entered, pursuant to the terms of the NPT, into force in over 60 countries. *Id.*

nuclear activity.⁵⁹ Unfortunately, under international law, non-aligned nations are not compelled to comply with the terms of the Treaty.⁶⁰ Their non-compliance impairs the overall effectiveness of the Treaty and weakens international response to proliferation.

4. *The Current Era of Containment*

In the 1970s, concern over the adequacy of international nonproliferation measures emerged.⁶¹ In 1974, India detonated a nuclear explosive.⁶² This dramatic event affected the outlook of the entire international nonproliferation community.

India, a non-aligned party to the NPT, was the first country to detonate a "peaceful" nuclear bomb from materials and technology imported from the West.⁶³ India's use of nuclear technology in this fashion was viewed as inconsistent with the main objectives of the NPT,⁶⁴

59. *Carrot and Stick Policy*, *supra* note 3, at 35; Gilinsky, *Nuclear Energy and the Proliferation of Nuclear Weapons*, in *NUCLEAR POLICIES: FUEL WITHOUT THE BOMB* 89 (R. Bacher ed. 1978).

60. J. BRIERLY, *THE LAW OF NATIONS* 49-56 (H. Walcock, 6th ed. 1963). A new law cannot bind a state without its consent. *Id.* International law is the sum of rules to which states have bound themselves. *Id.* No international body, therefore, can compel nations to sign international multilateral treaties. *Carrot and Stick Policy*, *supra* note 3, at 39.

61. 34 CONG. Q. ALMANAC 350 (1978) [hereinafter CONG. Q. ALMANAC, 1978]. In part, the concerns of the international community in the 1970s may be attributed to: (1) the oil crisis in 1973-1974 demonstrated that countries could not rely on foreign sources of energy and thus, encouraged countries to become self-sufficient; (2) the emergence of ambitious regional powers that resisted the control of the nuclear powers; and (3) the emergence of sophisticated terrorist groups that threatened to exploit the weaknesses of nuclear regulations. *Id.* at 351; see Scheinman, *supra* note 1, at 360 (stating that the projected transfer of nuclear technology and facilities to nations with incipient nuclear programs such as Taiwan and Pakistan also engendered concern about the adequacy of the nonproliferation regime).

62. Betts, *India, Pakistan and Iran*, in *NON-PROLIFERATION AND U.S. FOREIGN POLICY* 85 (J. Yager ed. 1980); CONG. Q. ALMANAC, 1978, *supra* note 61, at 350. India was the first nation to detonate an atomic bomb from materials imported for peaceful nuclear purposes, and the sixth nation to explode a nuclear device. Milhollin, *Dateline New Delhi: India's Nuclear Cover-Up*, 64 FOREIGN POL'Y 161, 161 (1986).

63. Recent Development, *Nuclear Non-Proliferation: Export of Nuclear Fuel to India* 22 HARV. INT'L L. J. 227, 232 (1981). Canada supplied the nuclear reactor used to develop the Indian bomb. The United States provided the heavy water needed to run the reactor. *Id.*; Milhollin, *supra* note 62, at 161.

64. *Carrot and Stick Policy*, *supra* note 3, at 34. The main objectives of the NPT are to contain the spread of nuclear weapons and to promote the peaceful use of nuclear energy. SPECTOR, *TODAY*, *supra* note 52, at 34-35. It is debatable whether a nuclear explosion is peaceful. *Id.* Although the Indian detonation was inconsistent with United States nonproliferation goals, the Nixon administration did not impose any sanctions. Moeller, *supra* note 63, at 232. Canada, however, in response, terminated all nuclear assistance to India. *Id.*; see Rao, *Proliferation and the Indian Test: A View from India*, 16 SURVIVAL 210, 210-212 (1974) (describing the effect of the peaceful

yet the nuclear states were powerless to prevent its occurrence.⁶⁶ After the explosion, treaty members undertook a major re-examination of nuclear nonproliferation strategy.⁶⁶

Immediately following the Indian explosion, the London nuclear suppliers group, comprised of many Eastern and Western industrial nations,⁶⁷ met secretly to address the need for concerted international action regarding the export of nuclear material and technology.⁶⁸ Concluding the need for more extensive controls, the London nuclear suppliers group formulated certain guidelines.⁶⁹ These guidelines were intended to supplement the perceived inadequacies of the NPT.⁷⁰ They endorsed multinational controls over enrichment and reprocessing⁷¹ fa-

nuclear explosion in India on other nations); *cf.*, Dougherty, *Nuclear Proliferation in Asia*, 19 ORBIS 925, 932-39 (1975) (describing the reaction of other nations to the peaceful nuclear explosion in India).

65. CONG. Q. ALMANAC, 1978, *supra* note 61, at 350. The Indian explosion demonstrated that nations could develop the bomb without detection from outside states. *Id.* This precluded other nations from trying diplomatically to deter the development of an explosive. *Id.*

66. See Scheinman, *supra* note 1, at 360 (stating that the explosion demonstrated to the nuclear powers that the international nonproliferation community could not contain the spread of nuclear weapons).

67. *United States Controls*, *supra* note 25, at 457. The nuclear suppliers group included: Belgium, Great Britain, Canada, Czechoslovakia, France, East Germany, West Germany, Italy, Japan, The Netherlands, Poland, Sweden, Switzerland, the United States, and the Soviet Union. STAFF OF SUBCOMM. OF THE SEN. COMM. ON GOVERNMENTAL AFFAIRS, 97TH CONG., 2D SESS., EUROPEAN REACTIONS TO THE INTERNATIONAL NUCLEAR FUEL CYCLE EVALUATION (INFCE) 13 (Comm. Print 1982).

68. *United States Controls*, *supra* note 25, at 458.

69. IAEA, Communications Received from Certain Member States Regarding Guidelines for the Export of Nuclear Material, Equipment, or Technology, IAEA Doc. No. INF/CIRC/254 (1978), reprinted in 17 I.L.M. 220, 225 app. (1978) [hereinafter Guidelines]. The United States, the Soviet Union, Australia, Denmark, Canada, Finland, Norway, the United Kingdom, The Netherlands, West Germany, Poland, East Germany, and Hungary were the original parties to the Guidelines. Coleman, *International Safeguards Against Non-Government Nuclear Theft: A Study of Legal Inadequacies*, 10 INT'L LAW., 493, 513 (1976). In 1976, Japan and France joined the guidelines. *Prospects for Nuclear Proliferation*, *supra* note 6, at 182.

70. Yager, *Incentives and Capabilities*, *supra* note 3, at 415. Tighter controls make it more difficult but do not create an impenetrable barrier to building nuclear weapon facilities in non-weapon states. *Id.* The Guidelines are an attempt to fill the gaps in the incomplete coverage of the NPT. *Id.*; see *Prospects for Nuclear Proliferation*, *supra* note 6, at 188-90 (explaining that nuclear source material such as uranium and plutonium exist in certain non-NPT nations and thus negates the effectiveness of the NPT and the Guidelines by providing alternative sources of supply).

71. Guidelines, *supra* note 69, at 226, guideline 7. Enrichment and reprocessing are two crucial phases of the nuclear cycle. See Ausness, *supra* note 5, at 72-87 (describing, in detail, the enrichment and reprocessing phases of the nuclear cycle and the methods used to produce weapons-grade material). Each state had the potential for providing material suitable for the production of nuclear weapons. *Id.* at 72. The uranium and plutonium routes are the two ways to develop weapons-grade material. *Id.* at 73. The enrichment phase of the nuclear fuel cycle is the critical step in the uranium

cilities, and required suppliers to exercise more restraint when providing nuclear assistance and materials.⁷² Because these guidelines and other international efforts to control nuclear materials⁷³ are not yet widely adopted, they have failed to establish international norms of behavior.

Many countries resent the guidelines⁷⁴ and sidestep them to acquire nuclear weapon capability.⁷⁵ The effectiveness of these international

route. *Id.* Alternatively, the reprocessing phase is the critical step in the development of weapons-grade material in the plutonium route. *Id.*

72. Yager, *Incentives and Capabilities*, *supra* note 3, at 414. The Guidelines require that: (1) suppliers obtain formal assurances from a recipient state that the state would not use imported nuclear technology to produce a nuclear device; (2) recipients satisfy specified levels of physical protection for nuclear material and equipment; (3) recipients apply IAEA safeguards to all imported material and equipment; (4) recipients agree to retransfer nuclear material derived from imported facilities to another country only after obtaining the same assurances as required by the original supplier; and (5) suppliers consult each other when a violation occurs; for example, when a recipient detonates a nuclear device or illegally terminates or violates an IAEA safeguard agreement. Ausness, *supra* note 5, at 94-95. The Guidelines for Nuclear Transfers are located in COMMUNICATIONS RECEIVED FROM CERTAIN MEMBER STATES REGARDING GUIDELINES FOR THE EXPORT OF NUCLEAR MATERIAL, EQUIPMENT OR TECHNOLOGY app. IAEA Doc. INFCIRC/254, reprinted in IAEA INFORMATION CIRCULAR, (Feb. 1978).

73. See International Atomic Energy Agency Convention on the Physical Protection of Nuclear Material, IAEA Document No. INFCIRC/274/rev. 1, May 1980 reprinted in 18 I.L.M. 1419 (1972) (describing an international agreement aimed at controlling nuclear materials) [hereinafter Physical Protection Convention]. In 1974, United States Secretary of State Henry Kissinger proposed the Convention to the United Nations General Assembly. *Implementing the Convention for the Physical Protection of Nuclear Material—Report to Accompany H.R. Rule No. 5228*, H.R. REP. No. 624, 97th Cong., 2d Sess. 2, reprinted in 1982 U.S. CODE CONG. & ADMIN. NEWS 3229, 3229. The most important articles of the Convention set forth that: (1) states that are parties to the Treaty will take appropriate domestic steps to ensure the safe transport of nuclear material; (2) states that are parties to the Treaty are obligated to obtain formal assurances that recipient countries who receive nuclear materials will observe the prescribed standards; and (3) states that are parties to the Treaty agree to exchange information relating to unauthorized removal, use, or alteration of nuclear material. *Convention on the Physical Protection of Nuclear Material—Report to Accompany Ex. H.R. REP. No. 96-2*, 97th Cong., 1st Sess. S. REP. No. 181, 97th Cong., 1st Sess. 2, reprinted in 1982 U.S. CODE CONG. & ADMIN. NEWS, 1663-66. The Treaty, however, has not been ratified by the 21 states requisite for entry into force. *Protecting Nuclear Materials*, *supra* note 32, at 308.

74. Ausness, *supra* note 5, at 95. The exclusive nuclear suppliers group formed, in secret, the Guidelines and unilaterally imposed the Guidelines on the rest of the world. *Id.* The nuclear supplier cartel intended to keep less developed countries dependent on its nuclear assistance through the restriction of the flow of nuclear technology and materials. *Id.* This, however, increased the tensions between the nuclear states and the non-nuclear states. *Id.*; see also G. ROCHLIN, *PLUTONIUM, POWER AND POLITICS* 163 (1979) (stating that the nuclear suppliers group meetings were held in secret and the original membership was not revealed initially).

75. Yager, *Incentives and Capabilities*, *supra* note 3, at 415. Countries that desire to do so can acquire nuclear materials. *Id.* For example, countries like Pakistan often choose to circumvent controls over the export of sensitive nuclear material technology

nonproliferation measures is therefore suspect. In part, the problem revolves around the enforcement of international regulations because many supplier nations simply choose to ignore the regulations when faced with the prospect of making a profit in the lucrative nuclear technology market.⁷⁶ Without the cooperation of individual nuclear supplier nations, tighter multilateral control will fail.⁷⁷

B. UNITED STATES NUCLEAR NONPROLIFERATION POLICY

All nuclear supplier states, including the United States, have enacted domestic legislation to establish procedures to conduct international nuclear business.⁷⁸ The provisions of the Nuclear Non-Proliferation Act of 1978 (NNPA)⁷⁹ form the focus of the modern legal statutory framework for United States nonproliferation policy. The NNPA updated, amended, and tightened the export control criteria established under the Atomic Energy Act of 1954.⁸⁰

Under the NNPA, the majority of President Carter's nonprolifera-

to acquire the necessary assistance. *Id.* Other countries, for example, India, rely on their own ability to develop a nuclear explosive device. *Id.*

76. *Prospects for Nuclear Proliferation*, *supra* note 6, at 183. See Note, *The Proliferation of Nuclear Reactors*, 20 J. WORLD TRADE L. 99, 109 (1986) (stating that nuclear trade is a billion dollar business that is legal under article IV of the NPT). The Guidelines require suppliers to obtain formal assurances from a recipient nation that it will not use imported nuclear assistance to produce a nuclear weapon. Guidelines, *supra* note 69. The Guidelines, however, are not legally binding. *Yager, Incentives and Capabilities*, *supra* note 3, at 414; Edwards, *supra* note 21, at 16.

77. *Prospects for Nuclear Proliferation*, *supra* note 6, at 181; Bettauer, *supra* note 50, at 1109-10.

78. Stoiber, *supra* note 2, at 369.

79. Nuclear Non-Proliferation Act of 1978, Pub. L. No. 85-242, 92 Stat. 120, 22 U.S.C.A. § § 3201-82, 42 U.S.C. § § 2011-2160a (1982) [hereinafter NNPA]. The NNPA was enacted after months of Congressional hearings and debate over the proper role of the United States as a nuclear exporter. *United States Controls*, *supra* note 25, at 458. For a list of Senate and House hearings on the NNPA, see Bettauer, *supra* note 50, at 1106 n.5. See Krauland, *supra* note 31, at 237-73 (describing the structure of the NNPA). For a legislative history of the Act, see generally *Nuclear Non-Proliferation Act of 1977: Hearings on S. 897 and S. 1432 Before the Subcomm. on Energy Research and Development of the Senate Comm. on Energy and Natural Resources*, 95th Cong., 1st Sess. (1978); *The Nuclear Antiproliferation Act of 1977: Hearings on H.R. 8638 Before the Subcomm. on Int'l Security and Scientific Affairs and the Subcomm. on Int'l Economic Policy Trade of the House Comm. on Int'l Relations*, 95th Cong., 1st Sess. (1977); *Nuclear Non-Proliferation Act of 1977: Hearings on S. 897 Before the Subcomm. on Energy, Nuclear Proliferation, and Federal Services of the Senate Comm. on Governmental Affairs*, 95th Cong., 1st Sess. (1977); *Nuclear Non-Proliferation and Controls: Hearing on S. 897 and S. 1432 Before the Subcomm. on Arms Control, Oceans, and Int'l Environment of the Senate Comm. on Foreign Relations*, 95th Cong., 1st Sess. (1977).

80. 42 U.S.C. § § 2011-2296 (1982). See *Carrot and Stick Policy*, *supra* note 3, at 35; *United States Controls*, *supra* note 25, at 459.

tion policies were enacted into law.⁸¹ President Carter was committed to the objectives of nonproliferation.⁸² He was successful in limiting nuclear exports by pressuring foreign suppliers to restrict their sensitive nuclear exports.⁸³ He also committed United States resources to ensure the growth of international safeguards on the transfer of nuclear technology.⁸⁴ During his administration, the United States began to develop a consistent framework for conducting nuclear trade.⁸⁵

The overall objective of the NNPA is to contain proliferation by limiting the flow of sensitive nuclear technology and material.⁸⁶ The NNPA is comprised of a mixture of assurances, restrictions, and incentives designed to enforce stricter controls over the supply of nuclear material and technology.⁸⁷ The Act contains a complex framework affecting agreements for cooperation,⁸⁸ issuances of export licenses,⁸⁹ and

81. Cross & Smith, *supra* note 13, at 638. See generally, Nye, *Non-Proliferation: A Long-Term Strategy*, 56 FOREIGN AFF. 601 (1978) (discussing President Carter's nuclear nonproliferation policy).

82. CONG. Q. ALMANAC, 1978, *supra* note 61, at 27E. In April 1977, President Carter, in a message to Congress, proposed a strong nuclear nonproliferation policy. *Id.* Carter stated in his message to Congress that one of the most pressing challenges of mankind is the need to halt nuclear proliferation. *Id.*

83. Cross & Smith, *supra* note 13, at 638-39. President Carter successfully checked the South Korean purchase of a reprocessing facility from France in 1976 and curtailed an experimental nuclear program in Taiwan in 1977. *Id.* at 638. President Carter also successfully convinced France to tighten up its nuclear export policies. *Id.*; see Power, *The Carter Anti-Plutonium Policy*, 7 ENERGY POL'Y 215, 231 (1979) (discussing other successes in nonproliferation policy during the Carter administration).

84. Cross & Smith, *supra* note 13, at 638-39.

85. *Id.* The Carter administration attempted to develop nondiscriminatory global policies to accommodate legitimate interests. Scheinman, *supra* note 1, at 363; see generally Nye, *We Tried Harder (And Did More)*, 36 FOREIGN POL'Y 101 (1979) (defending Carter's nuclear policies). *But see* Brenner, *Carter's Bungled Promise*, 36 FOREIGN POL'Y 94 (1979) (attacking President Carter's nuclear supply policy as discriminatory).

86. Cross & Smith, *supra* note 13, at 639. Under the NNPA, the IAEA safeguards require application to all transfers of nuclear material, equipment, and technology imported from the United States to non-nuclear weapon states. 42 U.S.C. § 2153 (1982). The purpose of full-scope safeguards was to prevent recipient nations from diverting nuclear material to weapon uses. Bettauer, *supra* note 50, at 1144. This provision of the NNPA aimed at closing an advantage enjoyed by nonsignatories of the NPT who were not obligated to comply in the past with IAEA safeguards over indigenously developed nuclear facilities. *United States Controls*, *supra* note 25, at 459. A basic purpose of the safeguard requirement was to ensure the United States that it would have "timely" warning of any diversion of its nuclear materials to non-peaceful uses. CONG. Q. ALMANAC, 1978, *supra* note 61, at 350.

87. Ausness, *supra* note 5, at 96-97. See Marshall, *Section 104 of the Nuclear Non-Proliferation Act of 1978: Establishment of International Nuclear Supply Assurances*, 11 N.Y.U. J. INT'L L. & POL. 399, 402-04 (1979) (stating that the NNPA was designed to strengthen control over nuclear exports).

88. 42 U.S.C. § 2153 (1982). The Secretary of State, with the assistance of the Secretary of Energy and in consultation with the Director of the Arms Control and Disarmament Agency negotiated agreements for cooperation. 42 U.S.C. § 2153(a)

authorizations of "subsequent arrangements" for retransfer and storage of spent fuel.⁹⁰

The legislation attempted to ensure that the United States would continue as a major supplier of nuclear materials.⁹¹ In offering nations a reliable supply of nuclear assistance, the United States hoped to deter non-peaceful uses of nuclear technology by exercising powerful economic leverage over recipient nations.⁹² Assistance is permissible only where recipient nations agree to comply with imposed international regulations and safeguards.⁹³

The Act requires the United States to terminate cooperation whenever a recipient nation violates a commitment to international safeguards, or to the peaceful use of nuclear materials, equipment, or technology.⁹⁴ The President may waive this termination provision of the

(1982). The President will approve a completed agreement in writing after he determines that it will promote the common defense and security of the two nations. 42 U.S.C. § 2153(b) (1982). The proposed agreement is then submitted to Congress with the approval of the President and becomes effective in 60 days unless Congress vetoes it. 42 U.S.C. § 2153(d) (1982).

The NNPA requires agreements to specify that international safeguards will apply to all peaceful nuclear activities of a recipient state. 42 U.S.C. § 2153(a)(6) (1982). The agreements must also stipulate that no assistance will be provided to a state in the development of any nuclear explosive device or related military purpose. 42 U.S.C. § 2153(a)(1) (1982). In addition, agreements for cooperation must allow the United States to demand the return of any nuclear material and equipment if at any time a recipient nation detonates a nuclear explosive or violates an IAEA Safeguards Agreement. 42 U.S.C. § 2153(a)(4) (1982). The President is directed to renegotiate all existing agreements for cooperation in order to bring them into compliance with statutory requirements. 42 U.S.C. § 2153c(a) (1982). *See Ausness, supra* note 5, at 97-99 (describing additional procedures for entering into agreements for cooperation).

89. 42 U.S.C. § 2156-57 (1982). The Act mandates that the President will authorize the sale of nuclear materials only to countries that have accepted full-scope safeguards. 42 U.S.C. § 2157(a)(1) (1982). This provision is intended to remove the advantage that nonsignatories of the NPT have over parties to the NPT. *See Ausness, supra* note 5, at 96 (describing export licensing procedures and criteria).

90. 42 U.S.C. § 2160 (1982). A subsequent arrangement applies to United States government approval of certain nuclear activities such as physical security measures, spent fuel management, safeguards, and other matters considered important in preventing proliferation. *Ausness, supra* note 5, at 99; *Stoiber, supra* note 2, at 369.

91. CONG. Q. ALMANAC, 1978, *supra* note 61, at 352. *See Stoiber, supra* note 2, at 371 (explaining that the United States intended to benefit only those nations that shared United States nonproliferation objectives).

92. 36 CONG. Q. ALMANAC 338 (1980) [hereinafter CONG. Q. ALMANAC, 1980]; *Carrot and Stick Policy, supra* note 3, at 36. As a major supplier, the United States believed that it could supervise the material and technology through binding bilateral supply agreements. *Krauland, supra* note 31, at 234. The United States believed it could then attain leverage forcing concessions from recipient nations that other nuclear suppliers might not require. *Id.*

93. 42 U.S.C. § 2153 (1982); *see supra* notes 37-48 and accompanying text (discussing the international requirements in the NPT that recipient nations must adhere to in order to receive nuclear materials from the United States).

94. 42 U.S.C. § 2158 (1982). The following conditions are grounds for the Presi-

NNPA if he determines that cessation of exports will seriously interfere with United States foreign policy objectives.⁹⁵ Although the waiver provision is rarely used, this provision gives the President great flexibility in conducting foreign affairs.⁹⁶ By a concurrent resolution, however, Congress may override the President's waiver.⁹⁷

The success of the strategy of the NNPA depends upon the ability of the United States to offer meaningful incentives to nations desiring nuclear technology.⁹⁸ Unfortunately, many countries perceive the unilateral legislative actions of the United States as intrusive, and they are not willing to accept the provisions of the Act.⁹⁹ Some argue that the NNPA has the opposite effect of that desired because it may encourage nations to accelerate their own efforts to acquire nuclear energy and, thus, may reduce their dependence on the United States.¹⁰⁰ On the other hand, President Carter had successfully declared a clear commitment to nonproliferation objectives when he limited nuclear exports to fully safeguarded nations.¹⁰¹

dent to terminate assistance: If a recipient nation (1) detonates a nuclear explosive; (2) violates or withdraws from IAEA safeguards; (3) engages in activities leading to the manufacture of a nuclear device; (4) materially violates any agreement under which it receives nuclear assistance; (5) assists a non-nuclear weapon nation to develop a nuclear explosive device; or (6) transfers reprocessing equipment to any non-nuclear weapon nation without prior approval under the terms of an agreement to which the United States is a party. *Id.*; CONG. Q. ALMANAC, 1978, *supra* note 61, at 354.

95. 42 U.S.C. § 2158(2) (1982). The President must submit a presidential waiver to Congress 60 days before the provision goes into force. *Id.* The President must find that withholding nuclear assistance would "seriously prejudice the achievement of United States non-proliferation objectives or would otherwise jeopardize the common defense and security" of limited states. *Id.*

96. See *United States Controls*, *supra* note 25, at 460 (stating that the special presidential waiver permits exports of nuclear materials to countries that refuse to comply with the NNPA). This provision has been used only once since the enactment of the NNPA. Note, *Testing the Statutory Criteria for Foreign Policy: The Nuclear Non-Proliferation Act of 1978 and the Export of Nuclear Fuel to India*, 14 N.Y.U. J. INT'L L. & POL. 419, 423-24 (1982). In 1980, under the veto provisions, President Carter authorized the sale of nuclear fuel to India for its nuclear energy reactor. *Id.*

97. 42 U.S.C. § 2158 (1982).

98. *Carrot and Stick Policy*, *supra* note 3, at 36. The United States offers incentives ("carrots") in exchange for compliance with imposed regulations ("sticks"). *Id.* at 26. Under the NNPA, the "carrot" is the guarantee of a reliable fuel supply and the "stick" is the requirement that recipient nations comply with IAEA safeguards. *Id.* at 36. See Bettauer, *supra* note 50, at 1178 (stating that the United States offers few tangible incentives to other countries to accept these imposed controls).

99. Ausness, *supra* note 5, at 103.

100. Edwards, *supra* note 21, at 17. The legislation led to a series of confrontations between the United States and some of its traditional trade customers. *Id.*; *infra* note 102 and accompanying text; see Ausness, *supra* note 5, at 103-05 (describing how United States efforts to control sensitive nuclear technology created resentment among less developed countries).

101. See *supra* notes 81-85 and accompanying text (discussing the Carter adminis-

President Reagan also vowed to support nonproliferation objectives when he took office.¹⁰² The nonproliferation policies of the Reagan administration, however, differ sharply from those principles that lie behind the passage of the NNPA.¹⁰³ The Reagan administration policy places greater emphasis on the United States as a reliable supplier of nuclear materials, although it only allows exports to its allies, and stresses the need to design security measures that will reduce the attractiveness of the nuclear option to non-nuclear states.¹⁰⁴

Reliability of supply is a fundamental principle incorporated in the NNPA.¹⁰⁵ The Carter administration exported only to nations that shared United States nonproliferation objectives.¹⁰⁶ The Reagan administration, on the other hand, transfers nuclear materials to nations that have not accepted full international safeguards.¹⁰⁷ As a result, nations that do not share United States nonproliferation objectives can nevertheless receive a reliable supply of nuclear assistance.¹⁰⁸

Furthermore, unlike the policy of the Carter administration, President Reagan's policy is selective and discriminatory.¹⁰⁹ The Reagan administration asserts that it makes distinctions between countries based on an assessment of their proliferation risks.¹¹⁰ In reality, this policy permits the Reagan administration to export to nations that are deemed important allies.¹¹¹ These nations often receive immunity from

tration's successes in limiting the flow of nuclear exports).

102. Miller, *Reagan Announces a Policy to Curb the Spread of Nuclear Weapons*, N.Y. Times, July 17, 1981, at A4. President Reagan emphasized the importance of limiting nuclear weapon proliferation from his very first statement on nonproliferation. *Id.*

103. Cross & Smith, *supra* note 13, at 641-42. *See infra* notes 106-117 (discussing the different policies of Presidents Reagan and Carter).

104. Clausen, *The Reagan Nonproliferation Policy: A Critical Midterm Look*, ARMS CONTROL TODAY, Dec. 1982, at 1; Cross & Smith, *supra* note 13, at 641.

105. 22 U.S.C. § 3201(b) (1982). The NNPA states that the United States will "take such actions as are required to confirm the reliability of the United States in meeting its commitments to supply nuclear reactors and fuel to nations which adhere to effective non-proliferation policies. . . ." *Id.*

106. 33 CONG. Q. ALMANAC 27E (1977) [hereinafter CONG. Q. ALMANAC, 1977]. In his April 27, 1977 message to Congress on nonproliferation, President Carter stated that the United States would supply nuclear materials to nations that "genuinely share" a "desire for non-proliferation." *Id.*

107. Cross & Smith, *supra* note 13, at 641-44.

108. *Id.* at 644.

109. Scheinman, *supra* note 1, at 356. President Carter sought to develop a global and comprehensive nuclear nonproliferation policy. *Id.* at 363.

110. *Id.* at 363; Cross & Smith, *supra* note 13, at 645-46.

111. Cross & Smith, *supra* note 13, at 645. The Reagan administration considers Western European countries, Japan, and other industrialized nations important allies for purposes of nuclear exports. *Id.*

certain NNPA provisions.¹¹² Yet, while United States control over nuclear materials and technology has softened under the Reagan administration, the new policy approach obtains nothing in exchange from these nations to increase the prospects of nonproliferation.¹¹³

Finally, the nuclear export strategy of the Reagan administration attempts to address the security fears of its trading partners.¹¹⁴ The Reagan administration has encouraged arms sales, direct security ties, and other measures to increase global security.¹¹⁵ The goal of this strategy is to make an independent nuclear force less attractive by resolving the strategic fears that govern the decision of a nation to develop nuclear weaponry.¹¹⁶ The inherent limitation in this strategy, as exposed in United States dealings with Pakistan, is that nonproliferation goals often suffer at the expense of other foreign policy objectives.¹¹⁷

C. PAKISTAN'S NUCLEAR POLICY

In recent years, Pakistan's clandestine pursuit of a nuclear program has created suspicion that it desired to obtain the technological capability to manufacture nuclear weapons.¹¹⁸ The Pakistani government denies allegations that it is attempting to develop nuclear technology for military purposes.¹¹⁹ Many commentators, however, view Pakistan's re-

112. *Id.* at 644. These nations, favored under the Reagan administration's export policy, are not required to receive approval for each instance in which they transfer United States-supplied fuel. *Id.*; see Oberdorfer, *Administration Moving to Loosen Laws on Curbs for Nuclear Weapons Abroad*, Wash. Post, Oct. 11, 1981, at A1, A6 (describing the Reagan administration's attempt to rewrite the NNPA).

113. See Cross & Smith, *supra* note 13, at 646 (explaining that while the Reagan administration loosened controls on plutonium, the United States obtained nothing in return to help achieve its nonproliferation objectives); *Legislation to Amend the Nuclear Non-Proliferation Act of 1978: Hearings Before the House Comm. on Foreign Affairs and its Subcomm. on International Security and Scientific Affairs and International Economic Policy and Trade*, 97th Cong., 2d Sess. 117 (1982) (quoting statement of Representative Bingham, who felt that the administration was taking risks without enunciating the concessions it hoped to get from its allies).

114. Cross & Smith, *supra* note 13, at 647. Many of the emerging nonproliferation risks such as Argentina, South Korea, Taiwan, and Pakistan have anticommunist governments; therefore, nonproliferation efforts provide President Reagan with a convenient excuse for the development of closer ties with these nations. *Id.*

115. *Id.* at 647.

116. L. DUNN, CONTROLLING THE BOMB 125-28, 155-56 (1982).

117. See *infra* notes 142-203 and accompanying text (discussing United States nonproliferation policy as applies to Pakistan).

118. Rais, *supra* note 10, at 458.

119. *Nuclear Weapons and South Asian Security*, REPORT OF THE CARNEGIE TASK FORCE ON NON-PROLIFERATION AND SOUTH ASIAN SECURITY 18 (1988) [hereinafter CARNEGIE TASK FORCE REPORT: SOUTH ASIA]; *Pakistan Will Not Be Diverted From Pursuing Peaceful Nuclear Program*, PAKISTAN AFF., Aug. 14, 1987, at 1 [hereinafter *Pursuing Peaceful Nuclear Program*]; President Mohammed Zia ul-Haq Ad-

fusal to sign the NPT, its rejections of IAEA safeguards, and its clandestine nuclear activities as an indication of a less than peaceful intent.¹²⁰

The origins of the nuclear program in Pakistan can be traced to the mid-1950s when the Pakistani government took advantage of the United Nations' Atoms for Peace initiative.¹²¹ The Pakistani government's goal was to establish a comprehensive nuclear energy plan.¹²² The creation of the Pakistan Atomic Energy Commission (PAEC) in 1955, whose purpose was to plan the development of nuclear energy in Pakistan, was the first important step in the establishment of this comprehensive program.¹²³ In the 1950s, however, Pakistan chose not to allocate significant resources to developing nuclear energy.¹²⁴ The attitude in Pakistan toward the development of nuclear power remained the same during the 1960s.¹²⁵

In the 1970s, however, the dynamics of Pakistan's nuclear program changed dramatically.¹²⁶ A number of economic, political, and security

dress to the Majlis-e-shoora, PAKISTAN'S NUCLEAR PROGRAM, July 10, 1984. *But cf.* Doerner, *supra* note 8, at 42 (interviewing President Zia who acknowledged that Pakistan's nuclear research program has the means to develop a nuclear weapon).

120. SPECTOR, NUCLEAR NATIONS, *supra* note 8, at 283-89 (stating that Pakistan was secretly trying to manufacture nuclear weapons). *But see* Rais, *supra* note 118, at 462 (asserting that the unwillingness of Pakistan to sign the NPT and its rejection of full-scope safeguards is wrongly perceived as an attempt to acquire nuclear capability for military purposes).

121. Betts, *supra* note 62, at 99. In January 1955, Pakistan established its first nuclear reactor research institute. *Id.*; *see* Rais, *supra* note 10, at 464-66 (stating that in this period Pakistan pursued a broad program of research and development).

122. Cronin, *Prospects for Nuclear Proliferation in South Asia*, 37 MIDDLE E. J. 595, 600 (1983). A committee of highly respected scientists formed the plan. *Id.* As a part of the plan, the Pakistani government sent civilian scientists and engineers abroad to obtain training in Western countries. *Id.* Many of the scientists trained abroad, however, did not return to work in Pakistan. *Id.* In recent years, Pakistan has had more success in recruiting these scientists because job opportunities in the West declined and Pakistan has become more dedicated to nuclear energy. Betts, *supra* note 62, at 100.

123. Rais, *supra* note 10, at 465. The commission was assigned a variety of activities, including the production of nuclear power, application of nuclear radiation, and management of the nuclear fuel cycle. *Id.* Dr. Nazir Ahmad was appointed the first chairman of the commission. Cronin, *supra* note 122, at 600.

124. Akram, *No Bombs in South Asia*, REGIONAL PERSP., Institute of Regional Studies, Islamabad 1 (1987). Before the 1970s, Pakistan was ambivalent in its approach to nuclear energy. *Id.*; *see* Betts, *supra* note 62, at 99 (stating that prior to 1972, Pakistan had fewer than 600 nuclear trained scientists).

125. Kapur, *Pakistan's Nuclear Development: A Note on Approach and History*, 6 ARMS CONTROL TODAY 243, 251 (1985). In 1965, Pakistan concluded an agreement with Canada to purchase a commercial nuclear power plant. Ebinger, *U.S. Nuclear Non-Proliferation: The Pakistan Controversy*, FLETCHER F., Summer 1979, at 1. The nuclear reactor, however, was not operational until 1972. *Id.*

126. Akram, *supra* note 124, at 2. The oil price hike imposed in the early 1970s imposed a crushing burden on Pakistan's economy. *Id.* Approximately 50 percent of

factors¹²⁷ contributed to the now fervent desire of Pakistan to establish a viable, independent nuclear program. The impetus behind the Pakistani nuclear program was the desire to achieve military parity with its archrival India through the development of the atomic bomb.¹²⁸

In the period between 1972 and 1977, Prime Minister Zulifiquar Ail Bhutto was responsible for all important nuclear decisions,¹²⁹ and fo-

Pakistan's export earnings was spent on importing petroleum. *Id.* As a result, Pakistan sought to acquire nuclear energy to meet its growing energy demands, poor energy resource base, and its high cost of imported energy. Rais, *supra* note 10, at 459. See EMBASSY OF PAKISTAN NUCLEAR PROGRAM, *Pakistan Today*, (available at Embassy of Pakistan, Washington, D.C.) (stating that Pakistan sought to achieve a degree of independence in its nuclear program).

In the 1970s, the nuclear program in Pakistan started to receive widespread domestic popularity because it was viewed as a way to enhance the prestige of the nation and its leadership role among Islamic countries. Rais, *supra* note 10, at 462. Former Prime Minister Zulifiquar Ail Bhutto successfully used the Indian nuclear test to mobilize Pakistani public opinion, to generate world public opinion against India, and to strengthen his links to the Islamic world. Kapur, *supra* note 125, at 253; Ebinger, *supra* note 125, at 2-3.

Pakistan's rivalry with India was a major motivating force behind its increased interest in acquiring nuclear weapons. *Id.* Since the creation of Pakistan in 1947, India and Pakistan fought three wars against each other; in 1947-1948 and 1965, they fought over the Kashmir region, a territory approximately 86,000 square miles at the apex of the frontiers of Afghanistan, China, India, and Pakistan; and then again in 1971 a dispute arose, which was the result of civil war in East Pakistan. *Id.*

In the 1965 Indo-Pakistani war, and the subsequent 1971 war, the balance of power was substantially altered in favor of India. *Id.* Prior to these defeats, Pakistani leaders believed that their military was as strong as that of India. *Id.* India prevailed in both wars and revealed that its military power was far superior to that of Pakistan. *Id.* The conviction of Pakistan that India wanted to dominate the region led Pakistan to consider the acquisition of nuclear weapons. *Id.* Furthermore, in the early 1970s, Pakistani fears of nuclear intentions in India again strongly influenced the decisionmaking of the Pakistani government. *Id.* See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 27-36 (describing the Indian-Pakistan rivalry).

127. After India detonated a nuclear explosive, Pakistan felt strategically justified and compelled to develop its own nuclear weapons program. See Akram, *supra* note 124, at 2-3 (explaining that the Indian explosion created a military and political threat to Pakistan). Former Prime Minister Bhutto once warned the nation that if India acquired nuclear status, Pakistan would have to follow suit, even if it entailed "eating grass." Kapur, *supra* note 125, at 243.

128. S. WEISMAN & H. KROSKY, *THE ISLAMIC BOMB* 161-223 (1981).

Pakistan regards the acquisition of nuclear capability as an important check on nuclear designs in India. Akram, *supra* note 124, at 9. The Indian explosion weakened the strategic position of Pakistan in South Asia. Ebinger, *supra* note 125, at 7. Pakistan desires nuclear capability to counter the huge disparities that exist in the conventional forces of India and Pakistan; see Betts, *supra* note 62, at 124-26; ARMS CONTROL AND DISARMAMENT AGENCY, *WORLD MILITARY EXPENDITURES AND ARMS TRANSFERS 1971-80* 52, 62 (1983) (showing that the armed forces numbered 1.28 million in India and 550,000 in Pakistan, and that military expenditures amounted to over \$4 billion in India and \$1.13 billion in Pakistan).

129. Kapur, *supra* note 125, at 252. Former Prime Minister Bhutto took charge of the nuclear program and made the chairman of the Atomic Energy Commission personally responsible to him. Cronin, *supra* note 122, at 605.

cused the Pakistani nuclear program.¹³⁰ Under his guidance, the objective of Pakistan was to acquire nuclear power through the production of plutonium.¹³¹ During the Bhutto regime, scientific leadership was organized, the development of a clandestine nuclear program emerged, and extensive efforts to purchase nuclear materials, technology, and equipment from the West and African nations began.¹³²

After Bhutto was overthrown in 1977 and General Mohammed Zia Ul-Haq ascended to power, the focus of the nuclear program in Pakistan changed.¹³³ General Zia promoted the production of highly enriched uranium¹³⁴ to build nuclear weapons.¹³⁵ In addition, the nuclear program in Pakistan was moved under the complete control and supervision of the military.¹³⁶

Because of its development of some critical areas of nuclear technology, Pakistan is believed to have attained a degree of expertise.¹³⁷ The general presumption is that the nuclear program in Pakistan is capable of producing weapons-grade material to build a nuclear device at its Kahuta uranium enrichment plant, but that Pakistan has not conducted a nuclear test.¹³⁸ The central effort of the Pakistani nuclear

130. Kapur, *supra* note 125, at 252. Bhutto stated in what was to be his final testimony before his death: "When I took charge of Pakistan's Atomic Energy Commission, it was no more than a signboard on an office. Assiduously and with granite determination, I put my entire vitality behind the task of acquiring nuclear capability for my country." Cronin, *supra* note 122, at 605.

131. Kapur, *supra* note 125, at 252. The foundation for the uranium enrichment route to a nuclear weapon was also formulated during the Bhutto period. *Id.*; see Cronin, *supra* note 122, at 600-02 (discussing the nuclear capabilities of Pakistan in general and its plutonium capabilities in particular).

132. Kapur, *supra* note 125, at 252. A deal with France for a reprocessing plant temporarily enhanced the prospect of a Pakistani plutonium bomb. *Id.* at 253. The deal with the French was safeguarded and cleared by the IAEA. *Id.* The plant would have had the capacity to reprocess about 100 tons of spent fuel under IAEA safeguards. Rais, *supra* note 10, at 467. The French later cancelled this deal after heavy pressure from President Carter. Cross & Smith, *supra* note 13, at 639.

133. Kapur, *supra* note 125, at 253. The cancellation of the French agreement dashed any Pakistani hopes of taking the plutonium route to the bomb. *Keeping Up With Neighbors*, *ECONOMIST*, May 25, 1985, at 32.

134. See *supra* note 71 and accompanying text (discussing the various routes to developing nuclear weapon capability).

135. Kapur, *supra* note 125, at 253; See *CARNEGIE TASK FORCE REPORT: SOUTH ASIA*, *supra* note 119, at 15 (stating that the core of the atomic weapon used by the United States against Japan in World War II at Hiroshima was made from highly enriched uranium).

136. Cronin, *supra* note 122, at 605; Kapur, *supra* note 125, at 253.

137. See *CARNEGIE TASK FORCE REPORT: SOUTH ASIA*, *supra* note 119, at 15-18 (explaining that Pakistan has the technological capability to refine uranium and has the facility for transforming natural uranium into a gasified form that serves as the fuel for the enrichment process).

138. Albright, *Pakistan's Bomb-Making Capacity*, *BULL. ATOM. SCI.* 30, 32 (June 1987). Pakistan has publicly acknowledged the operation of a uranium centrifuge en-

weapons program is the Kahuta uranium enrichment plant,¹³⁹ which allegedly is based on designs illegally obtained from the Netherlands and a equipment security system purchased elsewhere in the West.¹⁴⁰ Uncertainty persists, however, because of the clandestine nature of Pakistan's nuclear program.¹⁴¹

D. HISTORICAL OVERVIEW OF THE UNITED STATES - PAKISTAN RELATIONSHIP

Historically, the United States strategic interests in South Asia have largely influenced its relations with Pakistan.¹⁴² During the mid-1970s, the nuclear program in Pakistan caused increased apprehension in the United States when the Carter administration suspected that Pakistan

richment plant in the village of Kahuta. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 15. It is estimated that Pakistan has produced enough highly enriched uranium since late 1985 or early 1986 at the Kahuta plant to develop an atomic bomb. *Id.* at 16; Ottaway, *Caution Urged on Aid to Pakistan*, Wash. Post, Oct. 23, 1987, at A14 [hereinafter *Caution Urged on Aid to Pakistan*]; Ottaway, *Pakistani A-Bomb Seen Likely*, Wash. Post, Mar. 8, 1987, at A1 [hereinafter *Pakistan A-Bomb Seen Likely*]; Woodward, *Pakistan Reported Near Atom Arms Production*, Wash. Post, Nov. 4, 1986, at A1 [hereinafter *Pakistan Near Atom Arms Production*]; *U.S. Aid to Pakistan: Hearings Before the Subcomm. on Asian and Pacific Affairs of the Comm. on Foreign Affairs*, 100th Cong., 1st Sess. 1987 (statement of Richard T. Kennedy, Ambassador At Large for Non-Proliferation).

139. See Betts, *supra* note 62, at 102 (asserting that construction of the uranium enrichment plant at Kahuta was an indication that Pakistan wanted to pursue nuclear weapons capability). Furthermore, the Pakistanis tried clandestinely to build the plant. *Id.* The Carter administration's discovery of this project led him to invoke the Symington Amendment. Cronin, *supra* note 122, at 602. Pakistan could in theory use this facility to produce weapons-quality highly enriched uranium. SPECTOR, NUCLEAR NATIONS, *supra* note 8, at 114. Because the plant is not subject to IAEA controls, Pakistan can use its output to develop nuclear arms without violating international regulations. *Id.*

140. SPECTOR: NUCLEAR NATIONS, *supra* note 8, at 114; CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 15. Because the components of the Kahuta plant were obtained illegally, no western nation was able to demand that the facility be placed under IAEA safeguards. *Id.*

141. Rais, *supra* note 10, at 458; see *supra* note 139 and accompanying text (asserting that Pakistan can develop weapons-grade material).

142. T. ELIOT, JR. & R. PFALTZGRAFF, JR., UNITED STATES POLICY TOWARD PAKISTAN, in *THE RED ARMY ON PAKISTAN'S BORDER: POLICY IMPLICATIONS FOR THE UNITED STATES* 70 (Eliot, Jr. & Pfaltzgraff, Jr. eds. 1986); Betts, *supra* note 62, at 358. Until the late 1970s, the United States had a limited interest in the affairs of South Asia or Pakistan, beyond nonproliferation. *Id.* Nonproliferation, at that time, was considered important enough to require massive military commitments and political involvements. *Id.* Although by the 1950s, the United States had already established military ties with Pakistan because of its overriding concern to contain Soviet influence in the region. PAKISTAN-UNITED STATES RELATIONS: PROCEEDINGS OF THE NATIONAL SYMPOSIUM HELD AT ISLAMABAD, Area Study Centre for Africa, North and South Africa, Quadi-Azam Univ. 12 (R. Khan ed. 1983) [hereinafter PAKISTAN-UNITED STATES RELATIONS].

was trying to develop a nuclear weapon.¹⁴³ In response, President Carter attempted to restrict the flow of nuclear technology to Pakistan,¹⁴⁴ and in 1979, he invoked the Symington Amendment to the Foreign Assistance Act of 1961,¹⁴⁵ thereby terminating aid to Pakistan. The Symington Amendment prohibits aid to nations that deal in nuclear enrichment equipment, material, or technology but refuse to submit to international safeguards.¹⁴⁶ United States aid was suspended to Pakistan when it refused to open its nuclear enrichment plant to international safeguards and inspection.¹⁴⁷

The Soviet invasion of Afghanistan in 1979 changed the priorities of United States policy toward Pakistan.¹⁴⁸ The Reagan administration decided to develop closer relations with Pakistan to counter the perceived Soviet threat in South Asia.¹⁴⁹ In 1981, Congress enacted a legislative measure that enabled the President to waive, for six years, the application of the Symington Amendment¹⁵⁰ to Pakistan and, consequently, allowed the restoration of United States security assistance.

Adoption of this legislation was necessary as the President was not able to use the waiver provision of the Symington Amendment¹⁵¹ with-

143. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 159 (reporting that in 1979, the United States discovered that Pakistan was acquiring enrichment technology from Western Europe and was building an unsafeguarded nuclear plant).

144. Cross & Smith, *supra* note 13, at 656. The Carter administration successfully won concessions of restraint from European suppliers. *Id.* Most Western suppliers refused to sell nuclear materials and technology to Pakistan without guarantees. D. PONEMAN, *supra* note 4, at 194. Switzerland, however, refused United States requests to restrict its nuclear exports to Pakistan. CONG. Q. ALMANAC, 1980, *supra* note 92, at 343.

145. Foreign Assistance Act of 1961 § 669 Pub. L. 97-113, title VII § 737(b), Dec. 29, 1981, 95 Stat. 1562 (codified as amended at 22 U.S.C. § 2429 (1982)).

146. *Id.* The ban does not apply to countries that agree to adhere to the system of international inspections in the NPT. 43 CONG. Q. ALMANAC 1668 (1987) [hereinafter CONG. Q. ALMANAC, 1987].

147. THE PLUTONIUM BUSINESS, *supra* note 44, at 137. The aid that the United States cancelled in 1979 was less than \$100 million. Betts, *supra* note 62, at 353. During the cutoff, Pakistan was able to receive help from other allies to offset its loss of United States aid. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 163 n.4.

148. *Carrot and Stick Policy*, *supra* note 3, at 43. The 1979 Soviet invasion of Afghanistan provided an important opportunity for Pakistan, as it reemerged as a strategic asset in the perception of the United States. Kapur, *supra* note 125, at 254.

149. 37 CONG. Q. ALMANAC 125 (1981) [hereinafter CONG. Q. ALMANAC, 1981]; PAKISTAN-UNITED STATES RELATIONS, *supra* note 142, at 172. A Reagan administration spokesman told Congress that the United States intended to construct a new relationship with Pakistan, which would evolve over a long period of time, and would serve the best interests of both countries. *Id.* at 173.

150. 22 U.S.C. § 2375 (1982) amended by 22 U.S.C. § 2375 (supp. IV 1986).

151. 22 U.S.C. § 2429(b)(1) (1982).

out the "reliable assurances" required to certify that Pakistan was not acquiring or developing nuclear weapons.¹⁵² Yet Congress, also amended the Foreign Assistance Act of 1961 that restricted the President's authority should Pakistan or any other non-nuclear weapon state detonate a nuclear weapon.¹⁵³

Under President Reagan's directive, Congress approved a six-year, \$3.2 billion aid package for Pakistan.¹⁵⁴ Many Congressional leaders opposed giving such unconditional aid to Pakistan¹⁵⁵ on the grounds that Pakistan did not make any substantial concessions over its nuclear program.¹⁵⁶ Although Congress had waived the Symington Amendment requirements, Pakistan was still possibly in violation of the Glenn Amendment.¹⁵⁷ The Glenn Amendment requires the termination of United States aid in the event that any non-nuclear weapon state acquires reprocessing technology or equipment without implementing international safeguards.¹⁵⁸

At this time, Pakistan was importing technology for the Kahuta plant without the requisite IAEA safeguards. This triggered the Glenn amendment, mandating the termination of aid to Pakistan.¹⁵⁹ Another

152. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 159. A two-and-a-half-year renewal of the 1981 legislation suspending the Symington Amendment was enacted in late 1987 because President Reagan was unable to obtain reliable assurances of the nuclear activities in Pakistan. P.L. 100-202, § 669, amending Foreign Assistance Act § 620E(d).

153. 22 U.S.C. § 2429(b) (1982) [hereinafter Glenn Amendment]. The Glenn Amendment was strengthened because the President was precluded from using its waiver for at least 30 days unless a joint resolution passed by a majority of both Congressional houses authorized its use. *Id.*

154. CONG. Q. ALMANAC, 1981, *supra* note 149, at 125. President Reagan sponsored a massive aid package to Pakistan to put into practice his policy of seeking better relations with that country. *Id.* The aid package was aimed at bolstering Pakistan's security against Soviet pressures. SPECTOR, NUCLEAR NATIONS, *supra* note 8, at 116.

155. CONG. Q. ALMANAC, 1981, *supra* note 149, at 173. Many Congressional leaders such as Senator Glenn wanted Pakistan to firmly commit itself not to pursue nuclear weapons technology. *Id.* Critics of the aid package feared that it might upset the balance of power between Pakistan and India. *Id.*

156. *See generally* Cross & Smith, *supra* note 13 (discussing President Reagan's failure to extract concessions from Pakistan prior to approving aid packages).

157. 22 U.S.C. § 2429(b) (1982); CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 160. Apparently, Pakistan secretly purchased reprocessing equipment. *Id.*

In 1977, President Carter, without formally invoking the Glenn Amendment, suspended aid to Pakistan for approximately one year because Pakistan was importing reprocessing technology from France. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 160. In 1979, France stopped transferring reprocessing technology to Pakistan after heavy pressure from the Carter administration. Cross & Smith, *supra* note 13, at 643.

158. 22 U.S.C. § 2429(b) (1982).

159. 22 U.S.C. 2429(b) (1982). The United States made diplomatic efforts to curtail the development of this plant, but these efforts were undermined when Pakistan

provision in the Glenn amendment, however, permits the President to waive the termination of aid if he determines that the elimination of assistance would be "seriously prejudicial to the achievement of non-proliferation objectives or otherwise jeopardizes the common defense and security" of nations.¹⁶⁰ In February 1982, the President exercised this authority and restored aid to Pakistan.¹⁶¹

In July 1984, tension between the United States and Pakistan heightened when three Pakistani agents were arrested in the United States for trying to smuggle high-speed electronic switches used to detonate nuclear weapons out of the country.¹⁶² United States intelligence reports indicated that these devices were destined for the Pakistan nuclear program.¹⁶³ In September 1984, President Reagan wrote to General Zia expressing concern over nuclear activities in Pakistan and sought assurances that the completed Kahuta plant would not produce weapons-grade material.¹⁶⁴

In response to United States protests regarding the smuggling incident, and President Reagan's September letter, President Zia promised not to produce weapons-grade uranium.¹⁶⁵ Despite Pakistan's attempt

received assistance from China and other nations. Cronin, *supra* note 122, at 602. The Reagan administration suspended talks with China on nuclear cooperation because it was concerned about possible Chinese assistance to the nuclear enrichment program in Pakistan. *Id.* at 603. China allegedly helped Pakistan operate its unsafeguarded uranium enrichment plant, conducted a nuclear test in the presence of a Pakistani official, and provided important nuclear design data. Milhollin, *supra* note 62, at 174. *But see* Kapur, *supra* note 125, at 245 (alleging that Chinese involvement in the nuclear affairs of Pakistan is mere speculation).

160. 22 U.S.C. § 2429(b) (1982).

161. Presidential Determination 82-7 (February 10, 1982), 3 C.F.R. § 241 (1983).

162. CONG. Q. ALMANAC, 1987, *supra* note 146, at 1688. *See* L. Spector, *Averting a Race to a Nuclear Armageddon*, FAR E. ECON. REV., Sept. 26, 1987, at 37 (noting that the 1984 smuggling incident confirmed fears that Pakistan was actively pursuing nuclear-weapons capability).

163. SPECTOR, NUCLEAR NATIONS, *supra* note 8, at 116; Atkinson, *Nuclear Parts Sought by Pakistanis*, Wash. Post, July 21, 1984, at A12.

164. SPECTOR, NUCLEAR NATIONS, *supra* note 8, at 116; Ignatius, *U.S. Pressuring Pakistan to Abandon Controversial Nuclear-Arms Programs*, Wall St. J., Oct. 25, 1984, at 37. Pakistan completed the Kahuta plant between 1981 and 1984. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 161. President Reagan's letter was seeking assurances that General Zia would not enrich uranium to more than five percent at the Kahuta plant. *Id.* Below five percent, the enriched uranium is not usable for nuclear weapons. *Id.* The President's letter warned of grave consequences for United States-Pakistan relations if uranium was enriched beyond this level. *Id.*; *see* Oberdorfer, *Pakistan Spurs Soviet's Afghan Pullout Plan*, Wash. Post, July 18, 1986, at A28 (reporting that Pakistani Prime Minister, Junejo, stated that the enriched uranium at the Kahuta plant had not reached five percent).

165. CONG. Q. ALMANAC, 1987, *supra* note 146, at 1668. SPECTOR, NUCLEAR NATIONS, *supra* note 8, at 117-118. The promise of Pakistan to comply with Reagan's terms was an attempt to ease tensions. *Id.* The Soviet bombing on October 12 of Afghan refugee camps in Pakistan triggered concerns over the prospects of increased So-

to violate United States laws, the President and Congress remained committed to continued support of Pakistan¹⁶⁶ and rejected a proposed law that would have put more restrictions on aid to Pakistan.¹⁶⁷

Eventually, the popular furor set off by the 1984 smuggling incident together with another nuclear material smuggling incident involving Israeli citizens¹⁶⁸ led to the implementation of legislation in 1985 designed to restrain, specifically, the Pakistani nuclear program without requiring the termination of United States assistance.¹⁶⁹ The Solarz amendment barred aid to nations that violate United States export laws to obtain nuclear technology, material, or equipment that could significantly assist in the manufacture of a nuclear bomb.¹⁷⁰ Another Congressional amendment targeted Pakistani nuclear activities by requiring the President to certify each year, as a condition of aid, that: (1) Pakistan does not possess a nuclear weapon; and (2) such aid will significantly reduce the risk that Pakistan will possess one.¹⁷¹

The 1985 Solarz amendment was designed to deter Pakistan from building a nuclear device.¹⁷² President Zia's announcement in 1985, however, that Pakistan possessed the capability to produce low-enriched uranium, revealed the ability of Pakistan to produce weapons-grade uranium.¹⁷³ Both in late 1985 and again in late 1986, and despite

viet military aggression against Pakistan. *Id.*

166. SPECTOR, *NUCLEAR NATIONS*, *supra* note 8, at 107.

167. *Id.* at 117. Under Senator Alan Cranston's proposal, aid would be terminated unless the President certified that Pakistan was not developing a nuclear explosive device or acquiring technology, material, or equipment with the intent of manufacturing or detonating a nuclear explosive device. *Id.* The amendment was never formally introduced because it lacked support. *Id.* at 286 n.27.

168. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 162. In May 1984, a California businessman was indicted for smuggling high speed electronic devices, known as krytons, to Israel. *Id.* Israel claimed that the nuclear equipment was for non-nuclear purposes. SPECTOR, *NUCLEAR NATIONS*, *supra* note 8, at 287 n.37.

169. SPECTOR, *NUCLEAR NATIONS*, *supra* note 8, at 119-20.

170. 22 U.S.C. § 2429 (1982) amended by 22 U.S.C. § 2429(a) (Supp. IV 1986). Cf. SPECTOR, *NUCLEAR NATIONS*, *supra* note 8, at 287 n.37 (noting that the President can waive the Solarz Amendment if he finds that exported items are not intended for use in nuclear weapons); 22 U.S.C. § 2429(b) (1982) (holding that the President can also waive this law if he invokes the waiver provision of the Glenn Amendment).

171. 22 U.S.C. § 2375(e) (Supp. IV 1986). The 1985 certification requirement bars aid and military sales to Pakistan if the President determines that Pakistan possesses a nuclear device. *Id.* This provision is only applicable to Pakistan and requires the President to certify each fiscal year that Pakistan does not possess a nuclear explosive. *Id.*

172. See S. REP. NO. 34, reprinted in 99th Cong. 1st Sess. 14 (1985) U.S. CODE CONG. & ADMIN. NEWS 158,173 (reporting on the legislative history of the 1985 Solarz Amendment).

173. SPECTOR, *NUCLEAR NATIONS*, *supra* note 8, at 118. Pakistani officials claim that the output limit of the Kahuta plant is below five percent enriched uranium, making it, in theory, far below the 90 percent level required for nuclear weapons. *Id.* Owing

this major revelation, President Reagan certified and continued to provide Pakistan with aid.¹⁷⁴

By 1986, United States officials believed that Pakistan developed the technology and possessed the materials, including the necessary enriched uranium, to build its first atomic bomb.¹⁷⁵ President Reagan, nonetheless, did not enforce his warning to President Zia prohibiting high enrichment at the Kahuta plant.¹⁷⁶ In fact, Pakistan's nuclear activities had no apparent negative impact on United States-Pakistani relations in 1986, and, moreover, the Reagan administration again offered a six-year aid package to Pakistan in the amount of \$4.02 billion to begin when the 1981 aid package expired.¹⁷⁷

II. UNITED STATES NONPROLIFERATION STRATEGY VIS-À-VIS PAKISTAN'S NUCLEAR POLICY

President Reagan's nonproliferation policy toward Pakistan emphasized incentives to discourage proliferation in the event that Pakistan were to take further steps toward nuclear weapons capability.¹⁷⁸ Under this policy, the United States gives political, military, and economic aid to Pakistan.¹⁷⁹ The policy, also contains counterincentive laws to influence Pakistani conduct by threatening to terminate economic and military assistance.¹⁸⁰ These approaches, thus far, have not resulted in

to the uniqueness of uranium, however, approximately 75 percent of the enrichment process is completed when uranium is enriched to five percent. Albright, *supra* note 8, at 30.

174. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 162.

175. *Pakistan Reported Near Atom Arms Production*, *supra* note 138, at A1; *Pakistani A-Bomb Seen Likely*, *supra* note 138, at A8; *Caution Urged on Aid to Pakistan*, *supra* note 138, at A14; Albright, *supra* note 8, at 30.

176. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 161; see *supra* note 164 and accompanying text (discussing the 1984 Reagan letter to President Zia).

177. T. ELIOT & R. PFALTZGRAFF, *supra* note 142, at 73. On March 24, 1986, the two governments agreed on an aid package consisting of \$2.28 billion in economic aid and \$1.74 billion in military aid. *Id.*

178. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 130 (discussing the massive United States military and economic aid program for Pakistan); Cronin, *supra* note 122, at 613 (noting that the current policy involves incentives and disincentives). In the 1980s, President Reagan gave massive military and economic aid to Pakistan. Cross & Smith, *supra* note 13, at 655. In 1981, the United States gave Pakistan, for a six year period, \$3.02 billion in economic and military aid. T. ELIOT & R. PFALTZGRAFF, *supra* note 142, at 73.

179. Cross & Smith, *supra* note 13, at 655 (describing United States aid to Pakistan during the Reagan administration).

180. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119. The important United States laws pertaining to nuclear conduct in Pakistan are: Foreign Assistance Act of 1961, § 659 (codified as amended at 22 U.S.C. § 2429 (1982)); Foreign Assistance Act of 1961, § 670 (codified as amended at 22 U.S.C. § 2429B (1982)); and

Pakistani nuclear concessions.¹⁸¹

A. PROBLEMS IN UNITED STATES-PAKISTAN RELATIONS IN THE 1980s

On July 10, 1987, a Pakistani-born Canadian was arrested in Philadelphia on charges of attempting to illegally export special hardened steel, that is used in refining heavily enriched uranium, to Pakistan.¹⁸² The incident put the 1987 Pakistani aid package in jeopardy.¹⁸³ Responding to domestic pressure, President Reagan suspended the aid package until a determination could be made on whether the Pakistani government was involved.¹⁸⁴

Some Congressional leaders demanded that President Reagan enforce the 1985 amendments and cut off aid to Pakistan altogether.¹⁸⁵ The Reagan administration, however, delayed its response to the situation until the facts were clarified and Pakistan had an opportunity to provide verifiable evidence to ensure United States leaders that it was not producing enriched weapons-grade uranium.¹⁸⁶ Even under the

Foreign Assistance Act of 1961 § 620E(1)(e) (codified as amended at 22 U.S.C. § 2375 (Supp. IV 1986); see *supra* notes 145-77 and accompanying text (discussing United States nonproliferation laws and their impact on Pakistan).

181. *Carrot and Stick Policy*, *supra* note 3, at 44; CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 52. United States nonproliferation measures did not prevent Pakistan from completing the Kahuta enrichment plant or from apparently obtaining sufficient amounts of highly enriched uranium to produce a nuclear device. *Id.*

182. *Pakistan Must Act*, *supra* note 16, at A22; CONG. Q. ALMANAC, 1987, *supra* note 146, at 1668. Court documents allege that the suspect, Arshad Pervez, worked for a retired brigadier general named Inam Ul-Haq, who lives in Lahore, Pakistan. *Id.* The Pakistan government issued a warrant for Ul-Haq's arrest. *Id.* The Government of Pakistan also instituted an investigation into the alleged attempt by Pervez to export nuclear materials to Pakistan from the United States in violation of United States laws. Embassy of Pakistan, Press Release (July 22, 1987).

183. Wayman, *Foreign Aid Packaged for Fiscal '88*, Wash. Post, July 30, 1987, at A17; CONG. Q. ALMANAC, 1987, *supra* note 146, at 1668; *Pakistan Must Act*, *supra* note 16, at A22.

184. CONG. Q. ALMANAC, 1987, *supra* note 146, at 1726. The United States delayed the availability of \$340 million earmarked for Pakistan until January 15, 1988. *Id.*

185. See *Pakistan Faces Woes*, *supra* note 16, at A15 (reporting that influential members of Congress were angry over possible Pakistani involvement in the smuggling incident because some of them played important roles in pushing through the new Pakistani aid package); CONG. Q. ALMANAC, 1987, *supra* note 146, at 444, 1728 (citing that both Senator Glenn and Congressman Fascell requested an aid cutoff to Pakistan until Pakistan assured the President that it was not manufacturing a nuclear bomb); Oberdorfer, *Lawmakers Say Aid to Pakistan is in Jeopardy*, Wash. Post, July 18, 1987, at A22 (stating that the Foreign Relations Committee Chairman Senator Pell urged an aid cutoff).

186. CONG. Q. ALMANAC, 1987, *supra* note 146, at 1726. The United States wanted concrete evidence that Pakistan was not producing weapons-quality uranium.

threat of losing valuable assistance, Pakistan refused to meet United States demands to permit international inspections of its nuclear facilities.¹⁸⁷

The Philadelphia incident required an application of the United States nonproliferation laws, making aid to Pakistan conditional on two events. First, the laws required the President to recertify that Pakistan did not possess a nuclear weapon.¹⁸⁸ Second, the President had to determine whether the 1985 Solarz amendment was violated.¹⁸⁹ However, even if a violation was verified, the President could still waive the termination and permit the restoration of aid under the Glenn amendment.¹⁹⁰

In October 1987, United States officials advised Congress that the President could not certify with complete reliability that Pakistan did not possess a nuclear explosive or that it was not producing weapons-grade material.¹⁹¹ On December 18, 1987, the Pakistani-born Canadian was convicted, and the verdict in the case strongly suggested a Pakistani governmental link.¹⁹² Despite these facts, in mid-December, President Reagan quietly certified¹⁹³ and decided that the incident should not trigger the 1985 Solarz amendment prohibitions.¹⁹⁴

Id. at 1668; Oberdorfer, *U.S. Asks Pakistan to Stop Producing Bomb-Grade Uranium*, Wash. Post, July 23, 1987, at A37; Shipler, *U.S. Presses Pakistan on Atom Plants*, N.Y. Times, Sept. 22, 1987, at A15.

187. *Pakistan Spurns Nuclear Inspection*, Wash. Post, Aug. 4, 1987, at A10 [hereinafter *Pakistan Spurns Nuclear Inspection*]. Pakistani leadership rejected demands that it open its clandestine nuclear program to international inspection. *Id.*; see *Pursuing Peaceful Nuclear Program*, *supra* note 119, at 1 (stating that Pakistan rejects unilateral restraints on its nuclear program).

188. 22 U.S.C. § 2375(e) (Supp. IV 1986); CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 163.

189. 22 U.S.C. § 2429 (1982) amended by 22 U.S.C. § 2429(a) (Supp. IV 1986); CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 163.

190. 22 U.S.C. § 2429(b) (1982); CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 163.

191. *Caution Urged on Aid to Pakistan*, *supra* note 138, at A14. The Reagan administration had reservations about Pakistani assurances that it was not producing enriched uranium above the five percent level. *Id.*

192. Oberdorfer, *Conferees Won't Penalize Pakistan*, Wash. Post, Dec. 18, 1987, at A10 [hereinafter *Conferees Won't Penalize Pakistan*]; Gordon, *Businessman Convicted in Pakistan Nuclear Plot*, N.Y. Times, Dec. 18, 1987, at A15 [hereinafter *Businessman Convicted*].

193. *Nation Is Quietly Certified As Lacking Nuclear Explosives*, Wash. Post, Jan. 15, 1988, at A1 [hereinafter *Nation Is Quietly Certified*]. President Reagan stated that based on available evidence and the standard set forth in the statute, Pakistan does not possess a nuclear device. *Id.* at A24.

194. *Id.*

B. EVALUATING UNITED STATES POLICY CHOICES

Pakistan denies a connection to the Philadelphia smuggling affair,¹⁹⁵ but cannot deny other widely known and successful attempts to acquire and develop nuclear weapons.¹⁹⁶ Consequently, the President considered triggering the 1985 Solarz amendment to suspend aid earmarked for Pakistan.

1. *Reasons to Support the United States Decision*

Three strong arguments support the decision of the United States to stop short of imposing substantive sanctions on Pakistan. To the Reagan administration, and to Congress, the most important reason was the desire to secure a United States presence in South Asia to counter the Soviet military threat.¹⁹⁷ This rationale also led to United States support of the Afghan resistance and demonstrated that the Afghanistan situation ultimately took priority over concerns regarding Pakistan's nuclear program.¹⁹⁸ The United States considered Pakistan an important ally in that it provided the major supply route to the guerrillas resisting the Soviet occupation of Afghanistan.¹⁹⁹

Termination of aid may have led to a decision by President Zia to recalculate the risks involved in supporting the Afghan resistance.²⁰⁰

195. *Pakistan Must Act*, *supra* note 16, at A22; Weintraub, *Pakistan Denies Connection To Any Nuclear-Export Plot*, Wash. Post, July 22, 1987, at A1 [hereinafter *Pakistan Denies Connection*]; see Embassy of Pakistan, Press Release, (July 22, 1987) (reiterating that the government of Pakistan denies any connection to the nuclear export plot).

196. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 49; see THE EUROPA YEAR BOOK 1984: A WORLD SURVEY 1039, 2193 (1984) (reporting that in response to the Soviet invasion of Afghanistan in 1979, the United States bolstered the military position of Pakistan to counter the Soviet offensive in the region).

197. *Businessman Convicted*, *supra* note 192, at A15. The United States publicly objects to Pakistani nuclear activities but gives priority to resisting the Soviet influence in Pakistan and Afghanistan. *Pakistani A-Bomb Seen Likely*, *supra* note 138, at A1.

198. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 50; CONG. Q. ALMANAC, 1987, *supra* note 146, at 1668; Doerner, *supra* note 8, at 42. Pakistan serves as the arms conduit for more than 100,000 United States-supported guerilla fighters in Afghanistan. *Id.* at 43. Pakistan also acts as a pipeline for several hundreds of millions of dollars in CIA covert assistance to the Afghan rebels. *Pakistan Near Atom Arms Production*, *supra* note 138, at A16. Pakistan also cooperates with CIA intelligence activities near the Soviet Union. *Id.*

199. *Pakistan's Nuclear Insurance*, *supra* note 16, at A23; *Pakistan Denies Connection*, *supra* note 195, at A31; *Pakistan Faces Woes*, *supra* note 16, at A10. The United States considers withholding aid too high a security risk. Doerner, *supra* note 8, at 43.

200. Ottaway, *U.S. Expediting Missiles for Pakistan's Defenses*, Wash. Post, July 11, 1985, at A25; Weisman, *Russians Said to Step Up Air and Artillery Attacks Inside Pakistan*, N.Y. Times, May 15, 1985, at A8; *Pakistan Faces Woes*, *supra* note 16, at A1. There are over 100,000 Soviet troops in Afghanistan. *Id.* Because of the im-

Yet, Soviet attacks on Afghan refugee camps located in Pakistan revealed that Pakistan was also vulnerable to a Soviet military threat.²⁰¹ Soviet military presence suggested that Pakistan could not afford to alienate itself completely from the United States.²⁰² Nevertheless, the Reagan administration argued that an aid cutoff would jeopardize the United States interrelated goals of supporting both Pakistan and the Afghan rebels against Soviet pressure.²⁰³

Arguably, the recent signing of the Geneva Accords vindicates the decision of the United States to continue providing aid to Pakistan. In April 1988, Pakistan, the United States, the Soviet Union, and Afghanistan concluded agreements to end the conflict in Afghanistan.²⁰⁴ These agreements should enable the United States to shift its priority away from Afghanistan toward Pakistan and the nuclear issue. The agreements, collectively known as the Geneva Accords,²⁰⁵ were completed after General Zia, who opposed them,²⁰⁶ succumbed to heavy

mense Soviet presence in Afghanistan, the Soviet Union, for the first time, poses a direct military threat to Pakistan. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 47. See T. ELIOT & R. PFALTZGRAFF, *supra* note 142 (setting forth different perceptions of the Soviet threat to Pakistan).

201. *Carrot and Stick Policy*, *supra* note 3, at 46; see SPECTOR, NUCLEAR NATIONS, *supra* note 8, at 116-17 (stating that President Zia is dependent on the United States for arms and political support because of the Soviet presence in Afghanistan); Betts, *supra* note 62, at 349-53 (explaining that because of its need for economic and military aid, Pakistan cannot afford to alienate itself from its important allies, such as the United States).

202. *Pakistani A-Bomb Seen Likely*, *supra* note 175, at A1. Congress was also determined to continue supporting Pakistan because of its vital role concerning the Afghanistan situation. *Conferees Won't Penalize Pakistan*, *supra* note 192, at A10.

203. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 51 (stating that one of the arguments for United States military aid to Pakistan is that it slows down the nuclear program in Pakistan); Haass, *Give Pakistan Aid*, N.Y. Times, Aug. 28, 1987, at A31 [hereinafter *Give Pakistan Aid*] (asserting that aid gives the United States leverage because recipients know that they jeopardize aid when they either develop weapons or seek to acquire key nuclear technology in this country).

204. Klass, *Afghanistan: The Accords*, 66 FOREIGN AFF. 922, 922-45 (1988). On April 14, 1988, four agreements were reached to settle the conflict in Afghanistan: (1) the Bilateral Agreement between Afghanistan and Pakistan on the Principles of Mutual Relations, in particular on Non-Interference and Non-Intervention; (2) the U.S.-U.S.S.R. Declaration on International Guarantees; (3) the Bilateral Agreement between Afghanistan and Pakistan on the Voluntary Return of Refugees; and (4) the Agreement on the Interrelationship for the Settlement of the situation relating to Afghanistan. *Afghanistan-Pakistan-Union of Soviet Socialist Republics-United States: Accord on the Peaceful Resolution of the Situation in Afghanistan*, 27 I.L.M. 577, 577 (1988).

205. *Id.* at 922.

206. MacFarguhar, *Pakistan After Zia*, U.S. NEWS & WORLD REPORT, Aug. 29, 1988, at 75 [hereinafter *Pakistan After Zia*]. General Zia believed that the Geneva Accords did not adequately meet the needs and concerns of Pakistan. *Id.* at 76. He believed that the Accords neither removed the Soviet-supported government in Kabul nor secured the resettlement of the three million refugees from Pakistan. *Id.* General

pressure and reluctantly agreed to sign.²⁰⁷

In principal, each of the major actors under the Accords agreed to stop interfering in the Afghan affairs.²⁰⁸ The Soviet Union agreed to withdraw its troops from Afghanistan.²⁰⁹ The United States, in turn, promised to stop supplying arms to the Afghan rebels.²¹⁰ In addition, Pakistan pledged not to interfere with the Soviet-backed government in Afghanistan²¹¹ and to return the 3.5 million Afghan refugees in Pakistan.²¹² Under the leadership of Najibullah, the Afghan government agreed to cease interfering with Pakistan's affairs.²¹³

A second argument against imposing substantive sanctions against Pakistan contends that United States military aid to Pakistan helps to restrain that country's nuclear program.²¹⁴ President Reagan believed that the security assistance program was the most effective way to curtail Pakistani nuclear activities.²¹⁵ The Reagan administration argued that military aid relieved the security fears that motivated Pakistan to pursue nuclear weapons.²¹⁶ A cutoff would endanger this perceived lev-

Zia hoped that a settlement would include the establishment of a new Afghan government. *Id.*; see Klass, *supra* note 204, at 935 (describing that Pakistan wanted an independent government approved by a majority of the Afghans).

207. *Pakistan After Zia*, *supra* note 206, at 76. The United States, the civilian Pakistani government, and several allies pressured Zia to sign the Accords. *Id.* In addition, the Soviet Union launched a campaign of terrorism and sabotage against Pakistan to pressure Zia to sign. Klass, *supra* note 204, at 933.

208. Anderson, Behr & Moreau, *Who Killed General Zia?*, NEWSWEEK, Aug. 29, 1988, at 33 [hereinafter *Who Killed General Zia?*].

209. Klass, *supra* note 204, at 923. The Accords do not specify procedures for enforcement or verification, giving the Soviets flexibility and no accountability. *Id.* at 924.

210. Watson, Barry, Cullen, Barnathan, Strasser, and Moreau, *With Blood in Their Eyes*, NEWSWEEK, April 18, 1988, at 28.

211. Klass, *supra* note 204, at 922-23. The bilateral agreement between Afghanistan and Pakistan on the Principles of Mutual Relations prohibits Pakistan's interference in Afghanistan including support for the Afghan resistance. *Id.*

212. *Id.* at 923-24. The bilateral agreement between Afghanistan and Pakistan on the Voluntary Return of Refugees envisions the return of the Afghan refugees within 18 months, however, the Agreement fails to specify how to deal with refugees who choose to remain in Pakistan. *Id.* at 924.

213. *Id.* at 922.

214. *Nation is Quietly Certified*, *supra* note 193, at A24. The Reagan administration's assessment, however, came at a time when intelligence reports existed that indicated that Pakistan produced weapons-grade enriched uranium at its Kahuta plant. *Id.*

215. *Carrot and Stick Policy*, *supra* note 3, at 43; Cross & Smith, *supra* note 13, at 659. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 51 (arguing that United States aid allows Pakistan to modernize its military as a deterrent against India). *But see* Betts, *supra* note 62, at 350 (contending that massive military aid is necessary for the aid to substantially reduce the security motives of Pakistan as a nuclear deterrent). See also *supra* notes 126-28 and accompanying text (discussing the strategic fears of Pakistan).

216. See *supra* notes 214-15 and accompanying text (discussing President Reagan's arms strategy toward Pakistan).

erage and would reinforce the belief of Pakistan that nuclear independence was desirable.²¹⁷

In the past, however, aid packages have not successfully caused Pakistani leaders to change their nuclear policy or philosophy.²¹⁸ For example, after President Reagan's 1981 aid package, Pakistan completed its uranium enrichment plant²¹⁹ and has since reportedly produced weapons-grade material at the plant.²²⁰ This casts serious doubts on the effectiveness of the Reagan administration's aid strategy.

One final argument against imposing sanctions asserts that an unevenly applied United States nuclear export standard would create an international double standard.²²¹ The United States recognizes that it has not punished governments which have pursued more ambitious nuclear programs.²²² United States efforts to induce Pakistan to abandon its nuclear efforts were hampered because of the United States restrained reaction to the Indian nuclear test²²³ and United States passivity to the Israeli nuclear program.²²⁴ The United States failed to apply

217. *Pakistan's Nuclear Insurance*, *supra* note 16, at A23; *Give Pakistan Aid*, *supra* note 203, at A1; see Hussain, *Why Pakistan Needs a Nuclear Option*, Wash. Post, July 29, 1987, at A23 [hereinafter *Why Pakistan Needs a Nuclear Option*] (arguing that the elimination of United States aid would destabilize a weak civilian government in Pakistan); Betts, *supra* note 62, at 354 (purporting that an aid termination would reinforce the Pakistani view that nuclear weapons are needed to compensate for conventional inferiority against India); Oberdorfer, *U.S. Aid to Pakistan Ends as Waiver of Nuclear-Laws Expire*, Wash. Post, Oct. 1, 1987, at A23 (indicating that the Central Intelligence Agency believes that the termination of aid would not deter Pakistan from obtaining nuclear weapons capability, and would undermine United States anti-proliferation efforts).

218. See Cross & Smith, *supra* note 13, at 659 (claiming that no support exists for the assessment of the Reagan administration that expanded aid gave the United States increased influence over Pakistan's nuclear program); *Carrot and Stick Policy*, *supra* note 3, at 44-45 (revealing that massive aid did not result in concrete assurances from Pakistan that it will submit to international safeguards or open up its Kahuta plant to inspection).

219. See *supra* notes 137-40 and accompanying text (reporting on the development of the Kahuta enrichment plant).

220. See *supra* note 175 and accompanying text (confirming that United States intelligence reports show that Pakistan produced weapons-grade material at its Kahuta plant since approximately 1980).

221. *Why Pakistan Needs a Nuclear Option*, *supra* note 216, at A10.

222. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 5. For example, the United States did not pursue efforts to prevent proliferation of nuclear weapons with the same intensity in all countries. *Id.* For example, the United States did not penalize Israel for its aggressive nuclear program.

223. YAGER, INCENTIVES AND CAPABILITIES, *supra* note 3, at 419. See *supra* notes 65-68 and accompanying text (discussing the United States reaction to India's nuclear test).

224. *Id.* at 419 n.8. Israel is the most advanced nuclear state in the Middle East. REPORT OF THE U.S. PANEL ON NEW APPROACHES TO NON-PROLIFERATION, *Blocking the Spread of Nuclear Weapons* 28 (1986). The Israelis developed nuclear technology

its nonproliferation laws such as the Symington amendment or the 1985 Solarz amendment against either India or Israel.²²⁵ In effect, the United States ignored the nuclear activities of these countries. The laws, arguably were not intended to treat Pakistan's less-developed program with the same ambivalent attitude.²²⁶

2. *Reasons to Support the 1985 Solarz Amendment*

Although the arguments against the United States enforcement of the 1985 Solarz Amendment are persuasive, even stronger reasons exist for invoking the law. Pakistan continues to breach its commitments to the United States and to violate United States nonproliferation laws. The 1987 Philadelphia incident involving the Pakistani-born Canadian followed the very publicized 1984 incident involving the attempted export of nuclear technology to Pakistan.²²⁷ The tensions between the United States and Pakistan resulting from the 1984 incident led to Pakistani promises to refrain from producing weapons-grade material.²²⁸ Pakistan, however, continued to attempt the manufacture of nuclear weapons and violated its promise to President Reagan that it would not produce enriched uranium.²²⁹ President Zia's verbal assurances were no longer in good faith and, thus, the United States would have good cause to invoke its restrictions.²³⁰

to deter a conventional attack from one of their hostile neighbors. *Id.* at 29. Israel has the nuclear material and capability to develop a nuclear bomb. *Id.* Moreover, Israel is presumed capable of manufacturing nuclear warheads and has the weapon technology to deliver these warheads to nearby targets. *Id.* Israel, however, has avoided international commitments not to acquire nuclear weapons. *Id.*

Israel represents the most obvious failure of official United States nonproliferation policy. *Id.*; CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 5. The United States has received criticism for refusing to use its leverage to restrain the nuclear program in Israel. *Id.* While the United States has attacked other nuclear powers for disregarding international norms against nuclear arming, it has left Israel alone. *Id.*

225. *Why Pakistan Needs a Nuclear Option*, *supra* note 216, at A10; but see Rosenfeld, *Pakistan's Nuclear Insurance*, Wash. Post, July 31, 1987, at A23 (stating that the 1985 Solarz Amendment does not compel the United States to penalize India and Israel for their advanced programs).

226. *Pakistan's Nuclear Insurance*, *supra* note 223, at A10; see *supra* notes 168-83 and accompanying text (explaining that the 1985 Solarz Amendment attempted to dissuade Pakistan from continuing its smuggling activities).

227. See *supra* notes 162-67 and accompanying text (discussing the 1984 case involving the attempted export of electronic switches used to detonate nuclear explosives to Pakistan).

228. See *supra* note 165 and accompanying text (discussing President Zia's promises in the aftermath of the 1984 smuggling case).

229. See *supra* note 165-66 and accompanying text (citing mounting evidence that Pakistan has broken its promise to President Reagan not to produce weapons-grade material).

230. Pell, *Get Tough with Pakistan*, Wash. Post, Aug. 5, 1987, at A23 [hereinafter

In addition, Pakistan blatantly violated United States nonproliferation laws, in particular the 1985 Solarz Amendment. The amendment specifically mandates the termination of aid to any country that illegally attempts to export nuclear equipment, material, or technology from the United States.²³¹ In 1985, Congress enacted this amendment as a warning to Pakistan that the continued participation in smuggling activities would jeopardize American aid.²³² Pakistan, nonetheless, gave little consideration to this warning. Pakistan's entanglement in the smuggling affair mandated the application of the 1985 Solarz amendment.²³³ For the United States nonproliferation laws to have any practical value, they must be enforced where clear violations exist.

Furthermore, the willingness of the United States to accommodate Pakistani double-dealing on the nuclear issue is harmful to the global nonproliferation policy of the United States. The failure of the United States to hold Pakistan accountable for its conduct reflects directly upon the credibility of the nonproliferation policy of the United States, both in the region and elsewhere,²³⁴ as it sends out a strong message to Pakistan and the world that the United States is not willing to enforce its nonproliferation policy.²³⁵

Although unilaterally the United States cannot stop the development of a nuclear explosive in Pakistan, the enforcement of its nonproliferation laws will enable it to increase the credibility of its anti-proliferation rhetoric.²³⁶ The failure of the United States to use its leverage to

Get Tough With Pakistan]; see *Pakistan and the Smugglers*, Wash. Post, July 27, 1987, at A23 (stating that evidence exists to suggest that Pakistan is increasing the enrichment level up to weapons grade).

231. 22 U.S.C. §§ 2429 (1982) amended by 22 U.S.C. § 2429(a) (Supp. IV 1986).

232. See *supra* notes 170-77 and accompanying text (discussing the impact of the 1985 Solarz Amendment on Pakistan).

233. See *Get Tough With Pakistan*, *supra* note 229, at A23 (advocating the elimination of aid to Pakistan in light of its nuclear activities); see also CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 131-36 (stating that a majority of a task force comprised of American nonproliferation experts recommends that the President withhold at least a portion of the aid Congress has authorized for Pakistan).

234. *Get Tough With Pakistan*, *supra* note 230, at A23. The United States reaction to recent Pakistani nuclear activities will undermine the credibility of other nonproliferation initiatives in the region. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 134.

235. Ausness, *supra* note 5, at 105. In 1981, when the United States lifted trade sanctions on Pakistan, less developed countries viewed this event as evidence that the United States could not enforce its nonproliferation policies. *Id.* Shipping uranium fuel to India without full-scope safeguards, regardless of the mandate of the NNPA, also reflected upon the United States inability to impose its policies in the Third World. *Id.*

236. See Crawford, *Glenn Asks Reagan to Halt Pakistan Aid Pending Review of Nuclear Programs*, 35 SCIENCE 1321, 1321 (1987) (citing Senator Glenn's statement that the United States should take a firmer stand with Pakistan, or other countries will view the United States nonproliferation policy as a mere facade).

slow the emergence of a Pakistani nuclear bomb could have long-term negative repercussions on the nuclear policies of other countries,²³⁷ because the acquisition of nuclear weapons in high risk countries such as Pakistan dramatically increases the risk of proliferation.²³⁸

III. RECOMMENDATION

A. A SHORT-TERM RESPONSE

For the above reasons, Congress, with the support of President Reagan, should have taken concrete steps from the beginning to enhance American nonproliferation efforts in Pakistan. The key to reducing nuclear weapon capability in Pakistan is to stop Pakistan's efforts to produce weapons-grade material and thus stop short of de facto nuclear armament.²³⁹ If Pakistan continues developing its nuclear weapon capability, India, in response, will actively pursue nuclear weapons.²⁴⁰ If both nuclear arsenals grow, pressure will mount for further militarization of their weapons programs, and the prospects for effective regional nonproliferation will diminish.²⁴¹ It is urgent, therefore, to restrain Pakistan from any further militarization of its nuclear weapon capability.²⁴²

In fall 1987, there was general support for placing restrictions on the renewal of aid to Pakistan.²⁴³ One proposed piece of legislation would

237. Yager, *Incentives and Capabilities*, *supra* note 3, at 412. Proliferation in one country increases the risk of proliferation in other countries. *Id.* For example, the acquisition of nuclear weapons in China encouraged India to develop a nuclear weapons program, and the Indian nuclear test created a strong desire in Pakistan to acquire nuclear weapons. *Id.*

238. *See supra* notes 6-11 and accompanying text (discussing high risk countries such as Pakistan that have acquired nuclear weapons).

239. Spector, *Averting a Race to a Nuclear Armageddon*, 129 *FAR E. ECON. REV.*, Sept. 26, 1985, at 37 [hereinafter Spector, *Averting a Race*]; CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 132. The administration wants Pakistan to permit outside inspection of its Kahuta nuclear plant in hopes of easing United States-Pakistan relations over nuclear weapons proliferation. *U.S. Asks Pakistan to Stop Producing*, *supra* note 16, at A34.

240. Spector, *Averting a Race*, *supra* note 239, at 37 (1985); Doerner, *supra* note 8, at 42.

241. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 132-33.

242. *Get Tough with Pakistan*, *supra* note 230, at A23; *Conferees Won't Penalize Pakistan*, *supra* note 192, at A10.

243. *Pakistan Must Act*, *supra* note 16, at A22. Suggestions for dealing with the Pakistani affair included: (1) requiring periodic international inspections of all of the nuclear facilities in Pakistan; (2) insisting on Pakistan's acceptance of the 1968 non-proliferation treaty; (3) demanding that Pakistan prohibit ongoing efforts to illegally acquire sensitive nuclear materials and technology; and (4) arranging for United States officials to check with certainty the extent of the enrichment of uranium in Pakistan. *Id.* The Reagan administration chose not to adopt any of these measures. *Id.* *But See*

have required the President to terminate aid unless he could determine "on the basis of the best available information" that Pakistan had not exceeded the five percent enriched uranium threshold level.²⁴⁴ This standard would require Pakistan to accept periodic international on-site inspections of its nuclear facilities.²⁴⁵ Pakistan's agreement to permit international inspection of its uranium enrichment plant would have eased the United States-Pakistan confrontation over nuclear weapons proliferation.²⁴⁶

The Reagan administration and congressional opponents of the proposed legislation, however, stated that Pakistan would not comply, and that aid termination would seriously damage United States-Pakistan relations.²⁴⁷ In late 1987, as hopes of an Afghan settlement emerged, a consensus evolved against the legislation.²⁴⁸ Instead of sanctions, an agreement was reached to provide continued aid to Pakistan with no new nonproliferation conditions attached.²⁴⁹

Rather than facing the prospect of a future Pakistani nuclear test, the United States relies on "verifiable" evidence that Pakistan is not producing weapons-grade material.²⁵⁰ Until Pakistan actually meets this condition, however, Congress should withhold all or a substantial portion of the authorized aid.²⁵¹ Clearly, no guarantee exists that United States aid, or lack thereof, will yield enough leverage to force

Nation is Quietly Certified, *supra* note 193, at A1 (stating that President Reagan is likely to continue aid to Pakistan without any restraints).

244. *Caution Urged on Aid to Pakistan*, *supra* note 138, at A14. Rep. Stephen J. Solarz (D-N.Y.) introduced the legislation to suspend aid in the House; Sen. John Glenn (D-Ohio) introduced similar legislation in the Senate. *Id.*

245. *Id.*

246. *U.S. Asks Pakistan to Stop Producing*, *supra* note 16, at A37.

247. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 131. Pakistan consistently refused to open its nuclear plant to international inspection before India agreed to do the same. *Pakistan Spurns Nuclear Inspection*, *supra* note 187, at A10.

248. Oberdorfer, *Conferees Won't Penalize Pakistan*, *supra* note 192, at A10; CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 131. After the meeting in December 1987 between Soviet General Secretary Mikhail Gorbachev and President Reagan, the United States felt encouraged that a settlement of the Afghan situation might occur. *Id.* With these hopes, the United States backed away from legislation that could disrupt United States-Pakistan relations. *Id.*

249. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 134 (stressing that United States inaction in the face of recent Pakistani activities undermines United States initiatives in the region).

250. See *Pakistan Spurns Nuclear Inspection*, *supra* note 187, at A10 (showing that in August, the House of Representatives adopted a nonbinding resolution to cut off United States military aid to Pakistan unless Pakistan could produce "verifiable" evidence that it had not produced and was not producing weapons-grade material).

251. *Reagan Likely to Approve Aid*, *supra* note 193, at A1.

Pakistan to cease production of weapons-grade uranium.²⁵² Nevertheless, United States passivity to recent nuclear activities in Pakistan may undermine future efforts of the United States to curtail the nuclear program in Pakistan.²⁵³

A realistic hope exists that Pakistan will suspend production of weapons-grade material instead of losing valuable United States assistance.²⁵⁴ United States military aid has helped Pakistan continue modernizing its conventional forces.²⁵⁵ Furthermore, as long as domestic instability and regional insecurity persist in Pakistan, any Pakistani government will need continued United States diplomatic support.²⁵⁶ Finally, although these measures put a freeze on the nuclear weapon program in Pakistan, they are not unreasonable because Pakistan's nuclear option can remain essentially intact.²⁵⁷

If the United States decides to withhold aid, the possibility exists that the Pakistani government will refuse to succumb to United States pressure and that heightened tensions between the United States and Pakistan could arise.²⁵⁸ While this possibility exists, it remains unlikely that Pakistan will seriously jeopardize continued United States aid.²⁵⁹ United States assistance in the Afghan situation served Pakistani strategic and political interests.²⁶⁰ In fact, Pakistan provided aid to the Afghan rebels even before the United States gave major assistance to Pa-

252. See Yager, *Incentives and Capabilities*, *supra* note 3, at 351-53 (stating that in 1981, the Symington Amendment put over \$144 million in aid at risk, but Pakistan remained unresponsive to United States nonproliferation demands). The United States has not fully exercised its leverage over Pakistan to pursue nonproliferation objectives because of other foreign policy concerns. Cross & Smith, *supra* note 13, at 657-58.

253. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 134 (stating that the United States should cut off, at a minimum, a portion of its aid to Pakistan). At a minimum, the President should prevent delivery of certain advanced conventional weapon systems that are more appropriate for use in conflicts with India than for the defense of Pakistan's Afghan frontier. *Id.* This would enable the United States to avoid the actions that unnecessarily exacerbate the tensions in the region. *Id.* at 117.

254. *Id.* at 134.

255. Rais, *supra* note 10, at 471; CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 134.

256. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 134.

257. *Id.* (stating that United States financial assistance is an important source of patronage for the Pakistani government).

258. See *id.* at 135 (stressing that the nuclear option of Pakistan is retained even if it ceases to produce weapons-grade uranium).

259. See *id.* at 135 (recognizing that a reduction in United States assistance could have negative repercussions for United States-Pakistan relations). An aid cutoff would fuel anti-United States propaganda and reinforce an image of the United States as unreliable. *Why Pakistan Needs a Nuclear Option*, *supra* note 216, at A23.

260. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 135 (stating that Pakistan would remain committed to the Afghan resistance even if the United States cut off aid).

kistan.²⁶¹ Given the importance of attempting to curb the development of nuclear weapons in this tense region, whatever risks to United States-Pakistan relations exist are worth taking.²⁶²

B. A LOOK TOWARD THE FUTURE

Pakistan is unlikely to give the United States a firm renouncement of its nuclear option until its security position in South Asia improves dramatically.²⁶³ The security tension in the region stems in large part from the continued adversarial nature of the Indian-Pakistan relationship.²⁶⁴ This is exacerbated by the military presence of the superpowers and this alone makes unilateral nuclear restraint difficult and creates obstacles for bilateral Indian-Pakistani nuclear negotiations.

The best hopes for deterring proliferation lie in resolving these national tensions. For the United States to play an integral role, it must first become more sensitive to the desires, aspirations, and policy goals of India and Pakistan.²⁶⁵ In this way, the United States would enhance its ability to facilitate the adoption of confidence-building measures by India and Pakistan and to dissuade each country from beginning a nuclear arms race.²⁶⁶

CONCLUSION

At present, while the United States clearly articulates its policy to check the spread of nuclear weapons, it does not in practice effectively apply its rules. Consequently, United States policy lacks credibility in

261. *Id.*; *Get Tough with Pakistan*, *supra* note 230, at A23. The continued Soviet occupation in Afghanistan is a threat to Pakistan. *Id.*

262. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 135 (agreeing that the United States should take risks regarding its interests in Afghanistan in order to stop the prospects for proliferation in South Asia). The Soviet withdrawal from Afghanistan would remove the major rationale for continued United States assistance to Pakistan and encourage the United States to take aggressive non-proliferation steps to reduce the possibility of a South Asian nuclear arms race. *Id.*

263. Cronin, *supra* note 122, at 612. See *supra* notes 126-28 and accompanying text (discussing Pakistan's security problems).

264. See *supra* notes 126-28 and accompanying text (outlining the history of Indian-Pakistan relations).

265. SIPRI: PREVENTING PROLIFERATION, *supra* note 6, at 24.

266. Betts, *supra* note 3, at 339-45. Among the most frequently made suggestions to increase regional stability and reduce suspicion between the two countries are: (1) create a nuclear free zone in South Asia similar to one in Latin America; (2) promote a joint Indian-Pakistan peaceful nuclear energy venture; (3) establish multilateral security agreements; or (4) develop international cooperative measures that can force consensual restrictions on India and Pakistan to renounce their efforts to build nuclear bombs. See CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 89-135 (describing in depth the costs and benefits of each proposal).

South Asia.²⁶⁷ The indulgent attitude of the United States toward countries like Pakistan increases global prospects for widespread proliferation. In allowing Pakistan to circumvent clear United States policy objectives, the United States effectively abandoned its traditional commitment to preventing the risk of proliferation in the third world. A stronger commitment to its articulated nonproliferation objectives will provide the United States with greater leverage in dealing more successfully with potential proliferants.

The Geneva Accords did not, as hoped, result in the immediate resolution of the Afghan conflict.²⁶⁸ Each party accuses the others for violating the provisions of the Accords.²⁶⁹ Under the arrangement, the Soviets have begun to withdraw their troops;²⁷⁰ the fighting, however, continues.²⁷¹ Nevertheless, many in the United States see the withdrawal of Soviet troops as a victory over Soviet expansionism.²⁷² With Soviet hegemony in South Asia halted, the United States might stop perceiving Pakistan as the front-line state it once did in the struggle for control in the region.²⁷³ While the Reagan administration will continue to provide generous military aid to Pakistan, the newly elected administration beginning in January 1989 will have the opportunity to shift the United States priority back to the nuclear nonproliferation issue without sacrificing other regional objectives.²⁷⁴

267. CARNEGIE TASK FORCE REPORT: SOUTH ASIA, *supra* note 119, at 134; Yager, *Incentives and Capabilities*, *supra* note 3, at 407; *see supra* notes 228-32 and accompanying text (stressing that the willingness of the United States to accommodate Pakistan on the nuclear issue is harmful to the global nonproliferation policy of the United States).

268. Liu, *Waiting for the Siege*, NEWSWEEK, May 30, 1988, at 41 [hereinafter *Waiting for the Siege*].

269. *Who Killed General Zia?*, *supra* note 208, at 33. The Soviets and the Afghans assert that Pakistan continued to supply American arms to the rebels. *Id.* The United States alleges that the Soviets provide military aid to the Afghan government in direct violation of the Accords. *Id.*; *see Waiting for the Siege*, *supra* note 268, at 41 (indicating that the bloodshed in Afghanistan will continue in spite of the agreements).

270. *Who Killed General Zia?*, *supra* note 208, at 35. United Nations observers noted that, pursuant to the Accords, the Soviet Union met its initial deadline for withdrawing half of its stationed troops from Afghanistan. *Id.*

271. *Id.* (noting that the Afghan conflict is far from over).

272. Klass, *supra* note 204, at 925; *see Who Killed General Zia?*, *supra* note 208, at 35 (stating that the United States hopes that once the Soviets withdraw their troops, they will not return to Afghanistan).

273. *See Pakistan After Zia*, *supra* note 206, at 77 (recognizing that nonproliferation goals will gain importance in United States policymaking once Pakistan is no longer deemed a key to anti-Soviet strategy).

274. *Lost Linch-pin*, ECONOMIST, Aug. 20, 1988, at 13 [hereinafter *Lost Linch-pin*] (stating that the United States may approach Pakistan differently as the latter evolves into a less significant participant in the Afghan conflict).

POSTSCRIPT

The mysterious death of General Zia,²⁷⁵ the single most powerful political figure in Pakistan, on August 17, 1988, is likely to weaken Pakistan militarily and politically.²⁷⁶ General Zia,²⁷⁷ a shrewd politician, and the chief advocate of Pakistan's nuclear weapons program, was able to successfully withstand United States pressure to curtail his country's covert nuclear weapons program.²⁷⁸ Although many political leaders in the United States feel they have lost one of its most important allies in South Asia,²⁷⁹ Zia's successor will be largely preoccupied with establishing internal control²⁸⁰ and, thus, may be potentially more susceptible than Zia was to United States anti-proliferation pressure.

The United States should begin to play a stronger role in the nuclear weapons decisionmaking process in Pakistan. The successor government, at least initially, is likely to be more dependent on foreign aid.²⁸¹ Retaining a strong relationship with the United States will remain an important priority for any Pakistani government.²⁸² Furthermore, while the United States will continue to provide aid to Pakistan, the resolution of the Afghan war could result in the United States shifting priorities vis-a-vis Pakistan on the nuclear issue.²⁸³ As a condition of future

275. *Who Killed General Zia?*, *supra* note 208, at 30. General Zia died in an airplane explosion. *Id.* The circumstances surrounding his death have created speculation that sabotage was involved as Zia had many enemies abroad that might have wanted him dead. *Id.* The list of potential suspects includes the Soviet Union, the puppet Soviet government in Afghanistan, and India. *Id.* Internally, religious adversaries, political opponents, and military rivals are also suspects. *Id.* See, Serrill, *Death in the Skies*, TIME, Aug. 29, 1988, at 33 [hereinafter *Death in the Skies*] (discussing the suspects in the investigation of Zia's death).

276. See *Pakistan After Zia*, *supra* note 206, at 75-77 (discussing Pakistan in the aftermath of Zia's death); *Death in the Skies*, *supra* note 275, at 32-33 (indicating that Zia's sudden death leaves Pakistan in a precarious and unstable situation).

277. *Death in the Skies*, *supra* note 275, at 29. General Zia used the Afghan war as a tool for generating massive United States aid. *Id.* at 32; *Pakistan After Zia*, *supra* note 206, at 76.

278. Weisman, *What Zia's Death Means For Pakistan and the U.S.*, N.Y. Times, Aug. 21, 1988, at B1. See *supra* notes 178-81 (revealing that Pakistan has continued to receive aid despite Zia's covert operations in the United States to obtain illegally nuclear technology).

279. See *Who Killed General Zia*, *supra* note 208, at 30 (stating that the United States lost its most important ally in the region just as the United States-Pakistan joint anti-Soviet strategy in Afghanistan was paying off with the withdrawal of Soviet troops); *Pakistan After Zia*, *supra* note 206, at 76 (indicating that Zia shared United States concerns over the Soviet presence in Afghanistan).

280. *Pakistan After Zia*, *supra* note 206, at 76.

281. *Id.* at 77.

282. *Id.*

283. *Lost Linch-pin*, *supra* note 274, at 13. See Weymouth, *Who Killed Pakistan's Zia: The Fears and the Theories*, Wash. Post, Aug. 28, 1988, at B4 (stating that the United States policy toward Pakistan is shifting away from the Afghanistan situation

United States aid, the new Pakistani leadership could be susceptible to renewed pressure to make substantive arrangements to curtail its nuclear program.²⁸⁴

One must recognize, however, that with the sudden death of Zia, Pakistan's regional insecurities certainly remain, and perhaps will even heighten.²⁸⁵ Arguably, under these conditions, no successor Pakistani leader can afford to completely disavow the nuclear program without meaningful assurances from India to do the same.²⁸⁶ Therefore, guarantee exists that the next Pakistani leader will refrain from continued development of the country's nuclear program. Yet, the United States, must continue to play a strategic role in reducing the incentives Pakistan has for developing nuclear weapon capability.

to the nuclear issue).

284. *Pakistan after Zia*, *supra* note 206, at 77.

285. *Id.*; see *supra* notes 278-82 (discussing how Zia's sudden death left Pakistan without a strong government).

286. *Id.*; see Aiyas, *An Enemy's Grief is Seldom Shared*, U.S. NEWS & WORLD REPORT, Aug. 29, 1988, at 76 (stating that Indian political leaders believe that the successor will continue to develop the nuclear option).