Chapter 3

U.S. POLICY OF

CONTAINMENT THROUGH DENIAL

CHANGES IN U.S. NUCLEAR EXPORT POLICY:

Two common themes tied U.S. legislative and executive branch actions on nonproliferation in the period 1974-1980: (i) the need for more and more restrictions and safeguard controls on exports of nuclear material, equipment and technology; and (ii) an eagerness to help evolve an international institutional response to the challenges of proliferation. The expanding curbs dramatically limited the access of other countries, particularly the Third World, to commercial nuclear power technology. U.S. nonproliferation policy during the Nixon Administration era had
been characterized by a smug feeling of satisfaction with the working of the NPT and the IAEA safeguards. India's detonation of a nuclear explosive device, however, helped shatter that "complacency".\(^1\) After the Indian nuclear test, halting the spread of nuclear-weapons technology "became a critical objective of U.S. foreign policy."\(^2\) This was apparent from the way the Ford Administration helped organize the London club of nuclear exporting nations to impose stringent restrictions on global nuclear commerce.\(^3\) The same objective also spurred the Ford and Carter administrations to impose unilateral curbs on nuclear exports.\(^4\) This policy of containment through denial pushed the United States towards "nuclear isolationism,"\(^5\) hurting its domestic nuclear industry and eroding its image as the international leader in nuclear energy.

India's entry into the nuclear club was a catalyst in radically transforming "official U.S. thinking about the dangers of nuclear proliferation, and the political resources" that


\(^3\) This is discussed in detail in Chapter 2 of the thesis.


needed to be expended in controlling it.\textsuperscript{6} The forceful reaction India’s PNE test triggered and the wide impact it had on policy contrasted sharply with the benign way the United States perceived India when it was struggling in 1964 to draft a nonproliferation policy. Secretary of State Dean Rusk, questioning a key assumption in a government-sponsored report, said he thought "a basic question was whether we really should have a nonproliferation policy prescribing that no countries beyond the present five might acquire nuclear weapons. Were we clear that this should be a major objective of U.S. policy? For example, might we not want to be in a position where India or Japan would be able to respond with nuclear weapons to a Chinese threat?"\textsuperscript{7} [Emphasis added.]

In view of India’s use in an explosive device of plutonium generated from a civilian nuclear power programme, Ford’s policy on nuclear commerce focussed on controlling the spread of plutonium and the technologies for separating plutonium from irradiated fuel.\textsuperscript{8} He described plutonium as "the root of the


\textsuperscript{7} Rusk’s statement in Glenn T. Seaborg with Benjamin S. Loeb, 	extit{Stemming the Tide: Arms Control in the Johnson Years} (Lexington, Mass.: Lexington Books, 1987), p. 135.

\textsuperscript{8} Ford forced South Korea and Taiwan to give up plans for the reprocessing and recycling of plutonium. At home, he ordered a moratorium on U.S. commercial reprocessing of spent fuel until the world community could "effectively overcome the associated risks of plutonium."
problem" and declared his Administration's intent to employ "even more rigourous" controls.\textsuperscript{9} U.S. nuclear export policy was changed to favour those countries that were prepared to "forego, or postpone for a substantial period, the establishment of national reprocessing or enrichment activities or, in certain cases, prepared to shape and schedule their reprocessing and enriching facilities to foster nonproliferation."\textsuperscript{10}

Carter built his nuclear export policy on the premise of the Ford Administration that the controls regime needed to be further expanded and strengthened. He, however, resisted pressure for punitive action against India\textsuperscript{11} on grounds that it would alienate India and generate Third World sympathy for it and also that it might provoke "domestic Indian opinion towards developing [nuclear] weapons."\textsuperscript{12} The four goals of the Carter policy\textsuperscript{13} were: (i) "an increase in the effectiveness of international safeguards and controls on peaceful nuclear activities to prevent further


\textsuperscript{10} Ibid., p. 6.

\textsuperscript{11} During his presidential election campaign in 1976, Carter sang a different tune. He chastised the Nixon and Ford administrations for "rewarding" India with additional uranium fuel shipments after India had been allowed to "get away" with its 1974 blast without a "word of complaint".

\textsuperscript{12} Nye, "Nonproliferation: A Long-Term Strategy," p. 612.

proliferation of nuclear explosive devices”; (ii) “the establishment of common international sanctions to prevent such proliferation”; (iii) intensification of American efforts to make countries outside the NPT regime to sign the Treaty “at the earliest possible date”; and (iv) creation of nonproliferation incentives by rebuilding America’s image as a reliable nuclear fuel supplier.¹⁴

Carter’s policy also was based on the Ford hypothesis that the diffusion of plutonium technology would greatly increase the risks of misuse of commercial nuclear energy. Carter extended the Ford Administration’s moratorium on commercial reprocessing and recycling of plutonium and ordered the restructuring of the American fast-breeder programme to emphasize “safer” fuel cycle technologies.¹⁵ The moratorium¹⁶ was rooted in apparent concerns over safeguarding large stockpiles of separated plutonium and preventing clandestine diversion or theft or a terrorist raid.¹⁷ The intent was also to avoid overt discrimination by doing

¹⁴ Ibid.


¹⁶ The moratorium was lifted in mid-1978 (Stan Bejamin, Associated Press, Washington-dateline report, May 27, 1978) following NNPA’s enactment and pressure from the domestic nuclear industry, but by then the lead role of the United States in the enrichment market had been taken over by the Soviets and two emerging consortia in Europe.

¹⁷ As an example of such concerns, see Peter Gwynne, "Plutonium: 'Free' Fuel or Invitation to a Catastrophe?", Smithsonian, July, 1976.
domestically what other countries were being suggested to do.\(^{18}\) The Administration's strategy viewed the recycle of plutonium in commercial reactors "as posing a clear and present proliferation danger" and strongly opposed the establishment of civil plutonium economies "before proliferation-resistant technological and institutional alternatives had been explored."\(^{19}\) The challenge of reconciling fuel cycle needs with proliferation risks as well as a growing friction with allies prompted the Carter Administration to help organize the International Nuclear Fuel Cycle Evaluation (INFCE).\(^{20}\)

A key underlying assumption in the Carter policy, however, appeared to be flawed. The policy seemed to presume that a country seeking to clandestinely develop a weapons capability would do so through a circuitous route involving the misuse of commercial nuclear power technology, rather than by taking a short cut: building dedicated weapons facilities. This was the


\(^{19}\) Ibid., pp. 100-101.

\(^{20}\) INFCE's conclusions, however, did not support U.S. contentions that commercialization of plutonium recycle be deferred because of high proliferation risks. (Warren H. Donnelly, "Conclusions and Observations in the Summary Report of the International Nuclear Fuel Cycle Evaluation," in U.S. Congress, Senate Committee on Government Affairs and House Committee on Foreign Affairs, *Nuclear Proliferation Factbook*, Joint Committee Print [September 1980], pp. 446-457.)
path Israel had taken\(^{21}\) and the one Pakistan was to adopt. The route to nuclear weapons through a commercial nuclear power programme\(^{22}\) is not only technically complicated, but politically it is fraught with grave risks of detection if materials from safeguarded facilities are diverted.\(^{23}\) No nation "has yet employed material derived from nuclear power facilities to produce its first nuclear explosives."\(^{24}\) Further, the controls imposed by the new policy raised the question whether they were consistent with the undertaking of nuclear-weapons member states in the NPT to contribute to "the further development of the applications of nuclear energy for peaceful purposes" (Article IV). The curbs on reprocessing and enrichment technologies also

\(^{21}\) Israel has no commercial nuclear power programme. (International Atomic Energy Agency, Newsbriefs, Vol.6, No.1, January-February 1991, p. 1, and Leonard S. Spector, Nuclear Ambitions [Boulder, Colo.: Westview, 1990], pp. 172-173.) China also built a nuclear military complex based on dedicated weapons facilities before it ordered in recent years the construction of its first three commercial nuclear power reactors. However, no Chinese power reactor as yet is in operation. (IAEA, Newsbriefs, January-February 1991, p. 1.)

\(^{22}\) An example of a work directly linking nuclear power with nuclear weapons is Amory Lovins, L. Hunter Lovins and Leonard Ross, "Nuclear Power and Nuclear Bombs," Foreign Affairs, Vol. 58 (Summer, 1980). The authors contend that commercial nuclear power is "the main driving force behind proliferation" (p. 1138).


were clearly inconsistent with America's own original interpretation of nuclear activities permitted under NPT's Article II, under which non-weapons states have pledged not to acquire nuclear weapons or explosive devices. The Johnson Administration had informed Congress that:

"It may be useful to point out, for illustrative purposes, several activities which the United States would not consider per se to be violations of the prohibitions in Article II. Neither uranium enrichment nor the stockpiling of fissionable material in connection with a peaceful program would violate Article II so long as these activities were safeguarded under Article III. Also clearly permitted would be the development, under safeguards, of plutonium-fuelled power reactors, including research on the properties of metallic plutonium."\(^{25}\)

While the Ford and Carter administrations went about the task of tightening U.S. nuclear export controls and giving shape to a policy based on denial of access to technology, a number of independent initiatives were launched in the U.S. Congress to clamp conditions on such exports and also on U.S. economic and military aid. Two of the best known actions were the Symington and Glenn amendments to the U.S. Foreign Assistance Act of 1961. The common idea behind both amendments was to give teeth to the new nuclear export policy.

The significance of the congressional actions, however, went

\(^{25}\) Statement of ACDA Director Foster before a U.S. Senate committee. (U.S. Congress, Senate, Treaty on the Non-Proliferation of Nuclear Weapons, Hearings, 91st Congress, 1968, p. 39.)
beyond the intent to enforce compliance with the new export controls. By providing for sanctions, the actions were designed to bring within the ambit of the U.S. nonproliferation policy even countries with which the United States may have no nuclear cooperation or commerce. The threat of a cutoff of U.S. economic assistance and military cooperation was to be employed to help bring in line countries that were of proliferation concern to Washington. The threat of sanctions was also to be used by Congress and the administration to periodically review the domestic nuclear programmes of such nations; such a review process was designed to pressure countries to carry out their programmes in a way that would win them "good conduct" certificates periodically from Washington. The sanctions approach implicitly sought to expand the policy of nuclear technology denial to include all high-technology sales, including non-nuclear items that might be seen as indirectly contributing to a recalcitrant state's military potential or its weapons-related activities.

26 There was broad agreement in Congress on the need to establish "an international sanctions mechanism" for dealing with countries engaged in "unauthorized nuclear activities." The establishment of an elaborate sanctions mechanism was provided for in the ill-fated Export Reorganization Act of 1976. (William O. Doub and Eugene R. Fidell, "International Relations and Nuclear Commerce: Developments in United States Policy," Law & Policy in International Business, Vol. 8:913 [1976], pp. 929-934.)

27 Such embargoes on high-technology sales were advocated in Abraham A. Ribicoff, "A Market-Sharing Approach to the World Nuclear Sales Problem," Foreign Affairs (July, 1976).
The first such sanctions legislation was the Symington Amendment. Enacted initially in 1976, it provided for a cutoff of certain broad categories of economic and military assistance to any state that delivered or received enrichment or reprocessing equipment, materials or technology. It was modified the following year to preclude an aid cutoff on enrichment transfers if the exporting and importing states agree to place all such items under "multilateral auspices and management when available," and the recipient country agrees to open all its nuclear installations to outside inspection. The President was empowered to waive the provision and continue prohibited assistance if he determined and certified in writing to Congress that: (i) termination of such aid would have "a serious adverse effect on vital United States interests"; and (ii) he had received "reliable assurances" that the country concerned would not acquire or develop nuclear weapons or assist other nations in doing so. A less restrictive waiver standard was enacted for the benefit of the executive branch in 1981.

Another important 1977 sanctions-related legislation (the so-called Glenn Amendment) prohibits economic and military assistance to a country which delivers or receives reprocessing materials, equipment or technology or detonates a nuclear

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explosive device. This legislation was expanded in 1981 to apply the aid cutoff sanction to a country that either transfers or receives a nuclear explosive device. In 1985, the provision was still further expanded to incorporate actual or attempted illegal exports from the United States of items that would contribute significantly to the ability of a country to manufacture a nuclear explosive device, if it was so found by the President (the "Solarz Amendment"). The President, however, was empowered to waive both the Glenn and Solarz provisions if an aid cutoff were to be seriously prejudicial to the achievement of American nonproliferation objectives or "otherwise jeopardize the common defence and security" of the United States.

In addition, Congress has imposed several reporting requirements on the executive branch. These include:

-- Section 735 of the Foreign Assistance Act. An annual classified report on nuclear activities in any nation where the


32 U.S. Congress, Public Law 99-83 -- August 8, 1985, Section 1204, "Suspension of Assistance to Countries Violating U.S. Export Laws in order to Manufacture a Nuclear Explosive Device."

33 Besides the Symington, Glenn and Solarz provisions, there is one other sanctions-related amendment to the FAA that is country-specific. The Prezzler Amendment, a provision initially developed and incorporated in the 1985 foreign assistance legislation, applies only to Pakistan. (U.S. Senate, International Security and Development Act of 1985, Report of the Committee on Foreign Relations, Report No. 99-34.)
Symington or Glenn provisions are waived.

-- Periodic intelligence briefings to keep Congress "fully and currently informed" of significant nonproliferation developments.\(^{34}\)

The threat of sanctions is implicit or explicit in two other provisions. Penal action would be initiated against a nation detonating a nuclear explosive device if Congress determined that the blast would "cause grave damage to bilateral relations between the United States and the country" involved.\(^{35}\) There is also a statutory requirement that U.S. executive directors in the World Bank and the International Monetary Fund be instructed to consider, while carrying out their duties, "whether the recipient country has detonated a nuclear device, or is not a state party to the Treaty on the Non-Proliferation of Nuclear Weapons, or both."\(^{36}\) A major aim of these legislative actions was to deter another PNE being set off by a non-nuclear-weapons state.

NNPA QUEERS THE PITCH:

The most significant nonproliferation-related development that

\(^{34}\) The 1978 U.S. Nuclear Non-Proliferation Act specifically calls for such intelligence briefings.

\(^{35}\) Section 737 of the Foreign Assistance Act.

\(^{36}\) 22 U.S.C. Sec. 262 (b).
occurred during the Carter Administration was the passage of the U.S. Nuclear Non-Proliferation Act (NNPA), a complex web of prohibitions, inducements and controls.\textsuperscript{37} Domestic legislation was used to dramatically change the rules of nuclear cooperation between the United States and other countries. The NNPA had an important bearing on the Tarapur issue, dragging the question of fuel supply into the heat of a major U.S.-Indian dispute. The Tarapur case came to be seen in the United States as the "single most important test" of the Carter nonproliferation policy.\textsuperscript{38} The legislation's provisions in effect sought to ride roughshod over the Indo-U.S. agreement for cooperation by unilaterally imposing new fuel and spare parts supply conditions as well as comprehensive, perpetual safeguards on India. It has been widely acknowledged that the Indian PNE test was "a leading cause of congressional concern that culminated" in the NNPA.\textsuperscript{39} So it was no coincidence that one of the principal targets of the NNPA was India. The NNPA "sought to deny India, if possible, the fruits of its presumed abuse of U.S.-supplied materials."\textsuperscript{40}


\textsuperscript{40} Warren H. Donnelly and Richard P. Cronin, "Congress and Nuclear Nonproliferation Policy," in \textit{U.S. House Committee on Foreign Affairs, Congress and Foreign Policy -- 1980} (Washington,
The Act’s policy statement declared nuclear proliferation to be a grave national security threat to the United States, and stated "the imperative need" to strengthen international controls and safeguards on peaceful nuclear activities. An important aim of the legislation was to establish a set of common requirements and controls for international nuclear commerce by promoting agreement with other supplier nations on key issues. The NNPA was designed as the main statutory structure of the new U.S. nuclear exports policy that had evolved since 1974. The Act incorporated two of the policy’s principal themes: sanctions to enforce the American nonproliferation policy and extension of the safeguards regime to include scientific and technical data. The legislation embraced all the NSG guidelines and also sought the establishment of international and unilateral sanctions to deter proliferation. The idea of a common international sanctions regime was conceived in the Act. Some of its provisions, however, only represented "a common-sense codification" of the then existing policy on nuclear exports to non-weapons states.


41 Provisions of the Nuclear Nuclear Non-Proliferation Act of 1978 Relating to Nuclear Exports and Cooperation: Summaries and Excerpts, in Appendix G.


43 Statement by Senator John Glenn while introducing the bill. (Congressional Record, February 2, 1978, p. S1065.)
But in some crucial respects, the NNPA went far beyond the previous reforms:

(1) **CONTROLS ON NUCLEAR SCIENTIFIC AND TECHNOLOGICAL INFORMATION.** It created a new category of controlled information, called "sensitive nuclear technology." This new category covers any information (including information about a facility or about a major component) which is not available to the public and which is important to the design, construction, fabrication, operation or maintenance of an enrichment, reprocessing or heavy-water production facility, but does not include restricted data.\(^{44}\) This definition considerably widened "the net of nuclear information subject to control in U.S. cooperation and exports."\(^{45}\)

(2) **PROHIBITION OF CERTAIN ACTIVITIES BY NON-WEAPONS STATES.** It formally specified actions that would cause a cutoff of U.S. nuclear exports. In the case of non-nuclear-weapons countries, such actions include: detonation of a nuclear explosive device, abrogation or violation of IAEA safeguards, and "activities involving source or special nuclear material and having direct

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\(^{44}\) Section 4 of the NNPA. Restricted data is defined by the 1954 Atomic Energy Act, as amended, to include all data concerning (i) design manufacture or utilization of nuclear weapons; (ii) the production of fissile materials; and (iii) the use of fissile materials in nuclear energy production.

\(^{45}\) Donnelly, *Evolution of Nuclear Export Controls*, p. 17.
significance for the manufacture or acquisition of nuclear explosive devices," especially if the nation concerned has "failed to take steps which, in the President's judgement, represent sufficient progress toward terminating such activities." Additionally, in the case of all states, nuclear cooperation would be cut off to any country that materially violated a U.S. agreement for cooperation, or assisted a non-weapons state in activities relating to fissile material and nuclear explosive devices, or agreed to transfer reprocessing equipment or technology to a non-weapons state except under an international agreement or an understanding with the United States. However, the President was authorized to continue nuclear cooperation despite such actions if he determined that cessation would be "seriously prejudicial" to nonproliferation goals or "otherwise jeopardize the common defence and security" of the United States.

(3) **Restrictions on U.S. Consenting to Reprocessing.** It included tough new conditions on how existing U.S. consent rights over the transfer or reprocessing of American-origin spent fuel were to be exercised. This had much significance in the context of the 1963 Indo-American agreement since it affected how the United States could exercise its right of joint determination on

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46 Section 307 of the NNPA.

47 Ibid.

48 Ibid.
the effectiveness of safeguards over the reprocessing of the irradiated fuel. The Act permits the U.S. government to approve reprocessing only if it will not result in "a significant increase of the risks of proliferation beyond that which exists at the time that approval is requested."\(^{49}\) The government is required to allow reprocessing or retransfer only under conditions that will ensure "timely warning to the United States of any diversion well in advance of the time at which the non-nuclear-weapon state could transform the diverted material into a nuclear explosive device."\(^{50}\) [Emphasis added.] The NNPA categorizes decisions like reprocessing permission and retransfer of materials as "subsequent arrangements" with statutory conditions. The net effect of the conditions imposed by the Act was to virtually block U.S. reprocessing permission ever being given to a major "proliferation concern" country like India.

(4) **NOTICE TO RECIPIENT NATIONS TO EMBRACE NEW CONDITIONS WITHIN TWO YEARS.** It rewrote a section of the 1954 Atomic Energy Act and ordered that existing international agreements for nuclear cooperation (like the one with India on Tarapur) be renegotiated to meet nine specific conditions of its new export licensing guidelines.\(^{51}\) These conditions include safeguards

\(^{49}\) Section 303 of the NNPA.

\(^{50}\) Ibid.

\(^{51}\) These nine requirements are summarized in Annexure G (Section 401).
against unsafeguarded replication of facilities or materials through the use of transferred "sensitive nuclear technology". Safeguards also have to be maintained in perpetuity irrespective of the duration of the applicable agreement of cooperation and even if that accord is terminated or suspended for any reason. The Act gave a two-year ultimatum to recipient countries to renegotiate their respective agreement for cooperation with the United States and embrace all the new conditions and controls.

The NNPA retained the Department of Energy's control over technology transfers, and the NRC's pivotal role in nuclear export licensing, but specified rigid licensing procedures and conditions. To consider an export licence, the NRC should first receive a notification from the Secretary of State that the proposed export would not be "inimical to the common defence and security" of the United States; the letter should also state to what extent the licence application meets the Act's export criteria. The Secretary of State can also address additional issues: Whether issuing the licence will "materially advance the nonproliferation policy of the United States" or whether failure to do so would be "seriously prejudicial" to the objectives of such policy. Another condition for issuance of an export

52 This judgement was to be reached jointly by the Departments of State, Defence and Commerce as well as ACADA and the Energy Research and Development Administration. (Department of State Bulletin [May 16, 1977], White House Fact Sheet of April 27, 1977, p. 479.)

53 Section 304 (A) of the NNPA.
licence is that the NRC find -- on the basis of a "reasonable judgement of the assurances provided and other information" available -- that the export licensing conditions have been met.\textsuperscript{54} Most of the licensing criteria specified by the NNPA had been executive branch conditions for export previously, but "their enumeration in the Act gave them statutory standing and reduced the ability of the NRC or DOE to waive or change them."\textsuperscript{55}

The most important and controversial provision of the Act, however, was the requirement for \textit{fullscope} IAEA safeguards.\textsuperscript{56} This meant that a country importing any nuclear material from the United States would have to open all its nuclear installations (including those it had built on its own) to international inspection. The Act provided that after an 18-month grace period, which was to be used to persuade an importing country to accept comprehensive inspections, no nuclear exports were to be made to a non-weapons state unless IAEA safeguards were "maintained with respect to all peaceful nuclear activities in, under the jurisdiction of, or carried out under the control of such state at the time of the export."\textsuperscript{57} In the case of India, this in short meant that the United States would threaten to terminate supplies of uranium fuel for just one power plant

\textsuperscript{54} Ibid.

\textsuperscript{55} Donnelly, \textit{Evolution of U.S. Export Controls}, p. 18.

\textsuperscript{56} Section 306 of the NNPA.

\textsuperscript{57} Ibid.
unless New Delhi opened to outside inspection its 12 other nuclear facilities that were in operation then without IAEA safeguards. Although the President was empowered to authorize an export by waiving the fullscope safeguards requirement, Carter repeatedly voiced his reservations about the constitutionality of the Act's provisions that permitted Congress to overturn the President's waiver without giving him a veto power over the congressional action.

Combined with other provisions of the NNPA, the requirement for fullscope safeguards amounted to an ex parte change of the

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58 Sweet, "U.S.-India Dispute," pp. 50-51.

59 The presidential waiver can be disapproved by Congress. The President is authorized to waive the requirement of fullscope safeguards by notifying the NRC (in case of material or equipment export) or the DOE (in case of technology export) that failure to do so would be "seriously prejudicial to the achievement of U.S. nonproliferation objectives or otherwise jeopardize the common defence and security." Also, the first decision on an export to a country that does not have fullscope safeguards in effect has to be placed before Congress for 60 legislative days. During this period, Congress has the right to block the proposed export through a concurrent resolution in both Houses. If such action occurs, no further export can be made to the concerned nation during the remainder of the two-term term of that Congress unless: (i) the country in question accepts comprehensive safeguards; (ii) the President tells Congress that "significant progress has been made in getting such agreement"; or (iii) U.S. foreign policy considerations demand congressional reconsideration and Congress does not disagree again by concurrent resolution. If Congress does not disapprove the export, future exports have to be brought before Congress at yearly intervals until the country concerned has been successfully pressured to embrace fullscope safeguards.

terms of existing bilateral agreements, something which international law does not permit.\footnote{The international law issues are discussed in detail in Chapter 6 of the thesis.} The Act also incorporates other unilateral U.S. conditions for nuclear exports and transfers, particularly of replacement parts.\footnote{In case of spare parts for nuclear facilities, the Act requires the NRC to consult with the Secretaries of State, Energy and Commerce and the Director of ACDA in order to determine which component parts are "especially relevant from the standpoint of export control because of their significance for nuclear explosive purposes." The NRC has to license the export of each and every spare part on the basis of export criteria outlined by the Act and not on the terms of the concerned agreement for cooperation. However, no "major critical component" of any enrichment, reprocessing or heavy-water production facility can be licensed unless an existing agreement specifically designates such a component as an export item. A major critical component is defined as any part which the President determines is essential to the running of an enrichment, reprocessing or heavy-water production plant.} The NNPA's legislative history is "replete with references" to India's alleged misuse of Canadian and American nuclear assistance,\footnote{Donnelly and Cronin, "Congress and Nonproliferation Policy," p. 91.} and the fact that the fullscope safeguards provision, in the short run, was mainly aimed at India could barely be concealed. The Act's provisions in effect constituted an invalidation of the basic terms of the 1963 Indo-U.S. agreement and its subsidiary fuel supply contract.

The Act's sweeping, one-sided change of the rules of nuclear
cooperation evoked a sharp reaction not only in India, but also in other parts of the world including among U.S. allies in Europe. The legislation was seen as an "intrusion into other countries' nuclear programmes" and a pre-judgment of the ongoing INFCE study on ways to minimize proliferation dangers in fuel-cycle technologies. "Both the procedural role of the Nuclear Regulatory Commission and the various guillotine clauses threatening to cut off supply created a sense of confrontation and insecurity." This feeling of confrontation and insecurity was most visible in the Tarapur case.

TARAPUR DISPUTE HEATS UP:

The enactment of the NNPA was an attempt to export "virtue by statute." It completely changed the complexion of the Tarapur

64 India's response was made clear by Ambassador Nani A. Palkhivala, who said: "I think this legislation does overlook the forces of nationalism, the forces of pride and national independence... [Besides] the fact that the legislation is discriminatory, even politically it would be impossible for any government to submit itself to...this kind of imposition of discipline by an outside party... I do think it is the clear decision of the Indian government that it would not accept the imposition of fullscope international safeguards in the present circumstances. (Washington Star, "Indian Envoy Defines Stance on Nuclear Proliferation," May 9, 1978.)


66 Ibid., p. 102.

case, turning it into a bitter political and legal dispute between the United States and India and a major obstacle in the path of closer bilateral ties. The use of the Tarapur case as a political weapon against India had been made legitimate by the Act. And although the Act had provided an 18-month grace period for the enforcement of its fullscope provision on recalcitrant nations, it made little difference to Tarapur. Pending applications to license fuel and spare parts for Tarapur were quickly caught in a political-legal quagmire in the United States, with opponents of the exports insisting that India did not deserve a grace period since it had no intention of embracing comprehensive safeguards. Although the NNPA constituted a unilateral move to change the terms of a solemn and binding international agreement that the two countries had signed in 1963, official Indian response was restrained in contrast to the intense political rhetoric inside and outside Parliament. Two apparent decisions were taken by the Desai government:

(1) Seek a diplomatic resolution of the problem.

Desai believed the issue could be sorted out

68 The restraint was in conjunction with a firmness not to bow to American pressure. The firm, unbending Indian attitude had prompted Carter during his visit to India in January, 1978, to tell his Secretary of State, Cyrus Vance, to write a letter to Desai, "just cold and very blunt," on the American position. (Associated Press, New Delhi-datelined report, January 3, 1978.) Desai preempted such a letter being sent by writing his own blunt letter to Carter, saying there was no question of India joining the NPT regime. (Kuldip Nayar, "Desai's Firm Letter to Carter on NPT," Indian Express [New Delhi], January 28, 1978.)
politically and ruled out taking the United States to court to enforce the agreement for cooperation. "Relations between countries should not be decided in court," he declared in response to demands that his government should consider suing in the American courts or at the International Court of Justice at The Hague.  

Desai sought to undergird the peaceful nature of India's nuclear programme by renewing his pledge of no more nuclear explosions and asserting that the 1974 PNE test had not been worth the damage it had done to the country's credibility.  

(2) Search for substitute sources of uranium fuel for Tarapur. The Department of Atomic Energy was asked to begin work on developing a substitute fuel indigenously.  

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70 Prime Minister Morarji Desai, Statement on Peaceful Nuclear Explosions, Rajya Sabha, July 31, 1978, Official Text (New Delhi: Press Information Bureau). Desai belittled the scientific benefits of the 1974 PNE. "As regards the scientific value of such explosions, from my knowledge of the result of Pokharan explosion, I find that the 'experiment', if it can be called one, merely confirmed certain theoretical knowledge and gave some information of the behaviour of radioactivity and neighbouring rocks and shells which was considered to be of value. I regard these results inadequate compensation for the jolt to international opinion which it has imported and the consequences it has had on our peaceful pursuit of nuclear research and development." (p. 4. of the PIB text)  

71 This was indicated by Desai in a statement in Parliament in which he reported that technical and economic studies were under way to find a substitute fuel. (Press Information Bureau, New
another foreign source was also debated. The Carter Administration was warned that failure to honour U.S. fuel supply obligations would void the 1963 accord and free India to adopt any course in its self-interest, including the reprocessing of spent fuel without a joint U.S.-Indian determination of the adequacy of safeguards. And although the agreement clearly states that in the event of the pact being terminated

Delhi, Unstarred Question, Lok Sabha, July 27, 1978.)

Ambassador Robert Goheen, in a letter to Rep. Richard Ottinger, said: "If we pre-emptively cut off U.S. supplies, [India's] first response will be to attempt to develop its own technological substitutes -- including probably reprocessing the Tarapur spent fuel resulting from past U.S. supplies. At the same time, India will almost surely turn to the USSR, which I think is only too likely to step into the breach we shall have created at Tarapur. (Nucleonics Week, June 1, 1978, p. 7.)
Also see, Economic Times (New Delhi), "France, Russia Offer to Aid Tarapur," April 24, 1978.

According to Desai, India would abide by all the terms and conditions of the 1963 agreement "so long as the U.S. honours its obligations" under it. (Joseph S. Nye, "Nuclear Policy: Nuclear Fuel Exports to India," Statement before the House Committee on International Relations, May 23, 1978, Department of State Bulletin [July 1978], p. 46.)

Once the United States reneged on those fuel supply commitments, Desai said his government would be free to reprocess the spent fuel at Tarapur. He also warned that the American refusal to carry out a joint determination on whether reprocessing at the new Tarapur reprocessing facility could be effectively safeguarded was not in consonance with the 1963 agreement. Besides creating a serious storage problem, "this has resulted in reduced generation of power and has prevented us from utilizing the residual enriched uranium and the contained plutonium [in the irradiated fuel], which not only has put us to substantial loss both from the material and monetary points of view, but our own development has received a setback." (Press Information Bureau, New Delhi, Official Text of Prime Minister Morarji Desai's statement in the Rajya Sabha, April 24, 1978.)
by either side India would agree to return the irradiated fuel, it was declared that if that happened, "the Government of India would retain the title to the spent fuel." 

The first export case that came up before the NRC after the NNPA was signed into law was a Tarapur fuel export licence application that had been pending for 16 months. It sparked a major controversy that reached the President. The Commission split 2-2 on whether to license the fuel. One seat on the five-member regulatory agency was vacant, and the tie vote in effect constituted a rejection of the application. It was the first time the Commission in the three years since it was established had turned down an export licence application. The commissioners, however, voted unanimously to send the application to the President, who was empowered by the NNPA to decide on a proposed export -- subject to congressional review -- in the 

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74 Article VIII (C) of the Agreement for Cooperation which also stipulates that the "Government of the United States of America will compensate the Government of India for such returned material at the current schedule of prices then in effect domestically."

75 Official statement quoted in Indian Express (New Delhi), "India to Retain Title to Tarapur Spent Fuel if U.S. Cuts Supplies," March 15, 1978.


77 U.S. Nuclear Regulatory Commission, Decision of April 24, 1978, signed by Samuel J. Chilk, Secretary to the Commission, in the matter of Edlow International Company (Agent for the Government of India on Application to Export Special Nuclear Materials), Docket No. 70-2485.
event of the NRC being split on a decision. The case provided an interesting insight on how the NRC was carrying out its new role under the Act and how its commissioners were interpreting the NNPA's provisions.

Two of the commissioners, Peter A. Bradford and Victor Gilinsky, describing the NNPA as "a direct result" of India's 1974 nuclear explosion, interpreted the fullscope safeguards requirement and the export conditions set by the Act in a way that would have left no room for licensing any further fuel shipments to India. According to them, there were no adequate assurances that three of the NNPA export conditions (IAEA inspections, peaceful-use assurances and reprocessing controls) would be maintained on past and future fuel supplies. They built this argument on the thesis that the fate of the 1963 agreement hung in balance following the NNPA, and that if the agreement ended prematurely, India would not retain safeguards since New Delhi had all along seen the Tarapur inspections as a quid pro quo for a continued fuel supply. They argued implicitly that India should meet all the conditions of the NNPA without availing the benefit of the grace period because the Commission could not turn a blind eye to the "uncertainties concerning the application of safeguards to the material proposed to be exported

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or previously exported." These uncertainties, they argued, had
been heightened by the reiteration of Indian opposition to
fullscope safeguards and by the bleak prospect that such
inspections would be accepted before the expiry of the NNPA
deadline. Bradford and Gilinsky contended that the Commission
could issue a licence only if India provided "formal assurances
that regardless of the eventual fate of the agreement itself,
both current and previous conditions and restraints placed on
U.S.-supplied fuel, and on the Tarapur reactors themselves, will
be maintained; otherwise, the congressional intent that no U.S.
material or facilities contribute to explosive uses of nuclear
energy may be frustrated..." In other words, the export
conditions would be met only if the Commission found that
"assurances are to continue in perpetuity." 

Commissioner Richard T. Kennedy, however, argued that this
line of reasoning was fundamentally flawed. He said the two
commissioners had ignored findings by the executive branch and by
the NRC's own staff that the proposed export met the licensing

79 Ibid., p. 13.
80 Ibid., pp. 15-16.
82 The fourth commissioner, Joseph M. Hendrie, did not present
his written views on the issue but voted in favour of licensing the
fuel shipment. Hendrie was criticized at a congressional hearing
for not issuing written views and for claiming the commissioners'
licensing role was "quasi-judicial" and not open to congressional
scrutiny. (Nucleonics Week, June 1, 1978, pp. 7-8.)
requirements as defined by the NNPA. Instead, they had focussed
their arguments "on the fact that the United States-India
Agreement for Cooperation does not provide now for the more
stringent safeguards assurances which Congress requires be put in
place for the future."\textsuperscript{83} They arguments also hinged on the
"concern that safeguards should be applied beyond the term of any
agreement for cooperation."\textsuperscript{84} Kennedy said by contending that
"formal assurances" needed to be placed on NRC record before a
licence could be approved, the commissioners had tried to preempt
the negotiation process as had been envisaged by the NNPA and
usurp the role of the President who had been given responsibility
by the Act to "initiate a programme" to renegotiate existing
agreements for cooperation over a period of two years. The
"adoption of fullscope safeguards is a matter for the 18-month
negotiation period specifically provided by Congress; and
provision of perpetual safeguards assurances is unambiguously a
matter for the section 404 renegotiation process," Kennedy
declared.\textsuperscript{85} "If the Congress had intended that a guarantee of
perpetual safeguards should be an immediately applicable
requirement for United States nuclear exports, it hardly would
have made it a negotiating objective to be sought in the form of
amendments to existing agreements for cooperation. Instead,

\textsuperscript{83} Nuclear Regulatory Commission, Decision of April 24, 1978,

\textsuperscript{84} Ibid.

\textsuperscript{85} Ibid., p. 18.
Congress was explicit in stating that, though changes were to be sought in present agreements through negotiations to this end, this fact 'shall not affect the authority to continue cooperation pursuant to agreements entered into prior to the date of enactment of this Act',"^{86} Kennedy said in his ruling.

Despite the legal wrangling over how to interpret the provisions of the NNPA, foreign policy considerations also had a role to play in the Commission's deliberations. The Commission received "a regular and continuing flow of information on political developments in India regarding nuclear supply including news reports, descriptions of Indian parliamentary debates, and accounts of ongoing United States-India discussions on nonproliferation matters."^{87} Kennedy contended that by refusing to approve the licence, Commissioners Bradford and Gilinsky were attempting to reshape U.S. foreign policy. "The law did not intend this commission to rule on foreign policy," he said. "This is not only incorrect, it may be illegal."^{88} But at the same time Kennedy argued that the issuance of the licence would help the "foreign policy initiatives of the United States" and keep the dialogue with India going.^{89} Bradford (a Carter

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^{86} Ibid., p. 10.
^{87} Ibid., p. 6.
appointee) and Gilinsky,\textsuperscript{90} agreeing to forward the licence application to Carter, said "the President's obligations are broader and his freedom to act more flexible ... Thus, our inability to certify that the statutory criteria are met is not to be read as a statement that the President should not authorize this shipment."\textsuperscript{91}

Carter moved quickly and ordered the licensing of the fuel, telling Congress that he was convinced that to deny the export "would seriously undermine our efforts to persuade India to accept fullscope safeguards and would seriously prejudice the achievement of other U.S. nonproliferation goals."\textsuperscript{92} In his executive order, the President said the grace period provided by the NNPA should be utilized to find "mutually acceptable ways of meeting India's need for continued operation of the Tarapur Atomic Power Station and our need for fullscope safeguards and the attainment of other nonproliferation objectives."\textsuperscript{93}

\textsuperscript{90} Bradford and Gilinsky were indeed criticized by some in Congress for acting unlawfully and contrary to the clear intent of Congress by rejecting the licence application, but two powerful senators, John Glenn and Charles Percy, came to their rescue and placed written statements on record in support of the two commissioners. (Congressional Record, Senate [July 14, 1978], pp. S10851-10854.)


\textsuperscript{93} Congressional Record (May 2, 1978), p. H3459.
But in India, the NRC ruling, just weeks after the NNPA was signed into law, triggered a storm of protests in Parliament and the press.\(^{94}\) And Carter's decision to overrule the NRC and order the sale of fuel did little to mollify Indian feelings. The Desai government declared that "neither the domestic laws nor the domestic policies of USA can affect the supply of Tarapur's requirements of enriched uranium, and consequently both the delay in the supply of enriched uranium for purposes of Tarapur and, whatever the circumstances, the refusal to supply such requirements would be a breach of the agreement."\(^{95}\) [Emphasis added.] On the issue of fullscope safeguards,\(^{96}\) Desai said defiantly: "The question of inspecting our installations does not arise. As long as there is not an equal liberty to inspect all the installations in other countries, there can be no question of inspection of our installations at all. I have made that very clear to them. So there is no question about it. The freedom of

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\(^{96}\) The Prime Minister had made known that India would accept comprehensive inspections only on three conditions: (i) a Comprehensive Test Ban; (ii) agreement by weapons states to halt further manufacture of nuclear arms; and (iii) a pledge by weapons states to work towards nuclear disarmament. (Department of State, Limited Official Use incoming telegram (No. 8739) of January 6, 1978, from New Delhi on the meeting of five visiting senators with Desai.)
one is no less than the freedom of another." 97

Carter's approval of shipment of one year's worth of fuel supply was a reprieve for fuel-starved Tarapur but the station had several other fuel and spare parts applications pending in the United States. Even the presidential order on the one shipment had to wait before Congress for a minimum of 60 working days during which period the legislature had a right to veto it by a concurrent resolution in both Houses. Chief critics of the sale, Congressmen Richard Ottinger, Clarence Long and Christopher Dodd, all members of Carter's Democratic Party, took the Bradford-Gilinsky line that there were "serious uncertainties" about India's nuclear policy and introduced a resolution of disapproval, 98 which eventually collected about 60 co-sponsors. They pointed to three concerns: (i) India's position, incorporated in the 1963 agreement, that the only basis for its acceptance of safeguards at Tarapur is the fuel supply arrangement with the United States; (ii) India's refusal to sign the NPT or accept comprehensive inspections; and (iii) "India has reprocessing facilities now in operation and, therefore, is capable of plutonium production." 99

97 Department of State, Limited Official Use incoming telegram (No. 5435) of April 25, 1978, containing verbatim transcript of Rajya Sabha debate.


Proponents of the fuel shipment argued that the United States would be able to maintain more leverage over India's nuclear policy and programme by selling fuel than if New Delhi went to the Soviet Union or France for its supply or developed its own substitute fuel. The Administration told Congress that the 18-month to two-year grace period provided by the NNPA should be utilized to persuade India to soften its stance on inspections.  

"Conversely, this period also provides an opportunity for finding the most acceptable arrangements with respect to a discontinuation of U.S. supply in the event this becomes necessary." During his visit to Washington in June, 1978, Desai lobbied to have the resolution of disapproval defeated. He met members of the Senate Foreign Relations Committee and the House International Relations Committee, repeating his earlier assertion that India's 1974 test explosion was unfortunate but firmly ruling out the possibility of India signing the NPT or accepting fullscope inspections.  

Any obstacle that might have stood in the way of the fuel

100 See letter of May 18, 1978, from Secretary of State Cyrus Vance to Senator John Glenn in Appendix I.


shipment in the Senate was cleared when its Foreign Relations Committee implicitly approved the sale in a letter to Carter. The letter\textsuperscript{103} said it was of "critical importance" that there be "substantial progress at an early date" in comprehensively bringing India's nuclear programme under international nonproliferation controls. It warned that without the achievement of such controls, further fuel sales were "highly unlikely". The fuel sale was also endorsed by the House Committee on International Relations, but a congressional technicality required that the resolution of disapproval be put to a floor vote in the House. The shipment was finally cleared after the House voted 227-181 to dismiss the resolution.\textsuperscript{104} The vote followed an intense debate during which India was severely chastised, with one Congressman demanding the "spanking" of India and another saying that India was not a "great independent country" but a "great dependent country and we should remind them [Indians] of that fact".\textsuperscript{105} Some members exhorted the Administration to "take a leaf out of Canada's book" and terminate nuclear cooperation right away, while one Congressman urged his colleagues to reject the resolution of disapproval but by a narrow margin to make India aware of the "strong sentiment"

\textsuperscript{103} Letter of June 21, 1978, from Chairman John Sparkman of the Senate Foreign Relations Committee to President Carter, in Appendix H.

\textsuperscript{104} Congressional Record, House (July 12, 1978), p. 20520.

\textsuperscript{105} Congressional Record, House (July 12, 1978), pp. 20514-20516.
in Congress. Among the issues that figured in the debate were India's ban on the export of rhesus monkeys to the United States because of their use in weapons-related research, foreign aid, India's nuclear cooperation agreement with Vietnam, and the return of democracy in India following emergency rule.

The next formal consideration of a fuel licence application for Tarapur was not taken up by the NRC until March, 1979. In the interim period, India intensified pressure on the United States to honour its contractual fuel supply commitments. The Indian government stretched its interpretation of the 1963 agreement to warn that it would consider the pact breached and make its own fuel arrangements for Tarapur if U.S. supplies did not arrive within a "reasonable" time. No definition of what constituted a reasonable time was given. The U.S. Administration was also told that the problem was of its making and that it should initiate steps to amend the NNPA in order to fulfill its obligations under a binding international agreement.

106 Congressional Record, House (July 12, 1978), pp. 20506-20520.

107 Ibid.

108 Among the actions intended to mount pressure on the United States were the summoning of U.S. charge d'affaires in New Delhi to the External Affairs Ministry and the registration of a complaint with the State Department by the Indian Embassy in Washington. India also warned visiting Deputy Secretary of State Warren Christopher that bilateral relations would worsen if fuel was not shipped. (Associated Press, New Delhi-datelined reports, January 12, 1979, and February 28, 1979.)

109 Nucleonics Week, March 8, 1979, p. 10.
At the same time, India left room for diplomatic negotiations to continue on a possible settlement by slightly softening its position and agreeing in principle to a U.S. proposal. The proposal involved the setting up of a committee of scientists, jointly appointed by both countries, to examine the safeguards issue and make non-binding recommendations.\footnote{G.K. Reddy, "Nuclear Safeguards Panel: Theoretical Exercise," Hindu (Madras), November 23, 1978, Robert B. Cullen, Associated Press, Washington-datelined report, December 12, 1978, and United News of India, New Delhi-datelined report, December 27, 1978.} The Indian willingness to examine the issue of safeguards might have also been prompted by legal considerations: By merely calling for renegotiation under the NNPA, the United States had not actually imposed new conditions on the agreement for cooperation, and India therefore had no reason to refuse discussions on the subject and provide Washington with an excuse under international law to cut off fuel supply.\footnote{This legal aspect is dealt with in William Young, "Tarapur," An unpublished internal brief for the U.S. Government, November 28, 1979.} The committee of scientists was to have one Indian member, one American member and two others, one nominated by India and the other by the United States but coming from neither country. While the Americans claimed the committee was to determine whether fullscope safeguards would hinder India's peaceful development of nuclear energy, the Indians asserted the scientists were to examine the issues in a general
and theoretical way with a worldwide focus.\textsuperscript{112} It did not take much time for the proposal to run aground and the idea was soon forgotten, especially after its presumed author, Joseph S. Nye, left the Carter Administration to return to Harvard.

Before the NRC met in March, 1979, to consider a fuel licence application that had been gathering dust since November, 1977, it reversed without explanation its 1976 decision to permit legislative-type public hearings on the intervention of public-interest groups. Instead, it ordered the three groups, the Natural Resources Defence Council, the Sierra Club and the Union of Concerned Scientists, wanting to intervene again to make only written submissions.\textsuperscript{113} It also invited interested members of public to submit written comments on issues raised by the three groups. It ordered that the written submissions should focus on four topics: (i) the sufficiency of Desai's assurances that "he will not authorize nuclear explosive devices or further nuclear explosions"; (ii) the adequacy of IAEA safeguards at Tarapur; (iii) the status of U.S.-Indian negotiations on the return of the

\textsuperscript{112} Responding to questions on the proposed committee, Desai told an informal meeting of the Consultative Committee of Parliament on Atomic Energy, Space, Electronics and Science and Technology that any new safeguards system would have to on a non-discriminatory basis with universal application. (Department of State, Limited Official Use incoming telegram [No. 0057], of November 20, 1978.)

\textsuperscript{113} U.S. Nuclear Regulatory Commission, Order of December 8, 1978, signed by Samuel J. Chilk, Secretary to the Commission, in the matter of Edlow International Company (Agent for the Government of India on Application to Export Special Nuclear Materials), Docket No. 70-2738, pp. 2-4.
Tarapur spent fuel; and (iv) the Indian need for the amount of fuel that had been sought in the licence application. 114

When the licence application finally came up for hearing, it had a relatively smooth sailing. Carter had filled the vacancy in the NRC by appointing John Ahearne. Gilinsky, who had by then established a record of having rejected every Tarapur fuel application, teamed up with Bradford a second time to vote against licensing the export. The two repeated their previous arguments that there was a danger that, after the NNPA deadlines came into effect and the fuel supply was cut off, India may free itself of any reciprocal obligations under the 1963 agreement, and the protection provided to all U.S. nuclear exports to Tarapur would thus cease to exist. 115 But Ahearne's vote made it 3-to-2 in favour of issuance of the licence and obviated the need for presidential intervention or congressional consideration. 116 In his written opinion, Ahearne said although India had not embraced fullscope safeguards, talks were still in progress. "Congress clearly understood," he wrote, "that difficult negotiations would be required with India, provided a grace period for those negotiations, and in general expected that

114 Ibid., p. 3.

115 Donnelly and Kramer, Nuclear Exports, p. 6.

exports would continue to India during this period."\textsuperscript{117}