CHAPTER - II

POKHRA-I NUCLEAR TEST AND RUDIMENT NON-PROLIFERATION SANCTION
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India conducted its first nuclear test about 100 metres underground at the Pokhran test site in the Thar Desert of Rajasthan on May 18, 1974. India claimed the nuclear test to be a “Peaceful Nuclear Explosion” only for peaceful purposes. A brief press note of the Government of India stated, “As part of the programme of study of peaceful uses of nuclear explosions, the Government of India had undertaken a programme to keep itself abreast of developments in this technology, particularly with reference to its use in the field of mining and earthmoving operations. The Atomic Energy Commission, Government of India, also stated that India had no intention of producing nuclear weapons and reiterated its strong opposition to military uses of nuclear explosions”.

Technical details of the nuclear test revealed that the test, code named “Budha Smiled”, was an underground nuclear test carried out at a depth of more than 100 metres with a plutonium device in 10-15 kiloton range. Going by the statements of the AEC, this nuclear test used implosion technique for containing the explosion; possessed no venting of radiation and used highly refined and sophisticated device. Dr. Homi N. Sethna, the Chairman of the Atomic Energy Commission of India, noted that it was the first time an underground explosion had been carried out in the world through the medium of plutonium.

While the real purpose of India’s nuclear test was debated in many western countries, the Indian government sought to underline the peaceful nature of its nuclear testing, understanding the international climate where serious efforts were being made to

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2 The Hindu (Madras), 19 May 1974.

3 Ibid., 20 May 1974.
prevent nuclear proliferation to the non-nuclear weapon states. The Foreign Secretary, Mr. Kewal Singh, and the External Affairs Secretary, Mr. V.C. Trivedi met the envoys of the United States, the Soviet Union, Britain, France and Canada with which India had signed agreements for bilateral cooperation in the peaceful uses of nuclear energy to assure them that in conducting this underground test for peaceful purposes consistent with its international obligations, India had no intention of going in for nuclear weapons. External Affairs Minister of India, Mr. Swaran Singh, said in a statement, “This experiment is an important landmark in the development of nuclear technology for peaceful and economic uses. We have no intention of developing nuclear weapons... In performing this scientific test, India has not violated any of her international obligations”. As India was party to the ban only on atmospheric tests, it had reserved the legal right to carry out underground tests for peaceful purposes. And, the Chairman of the Atomic Energy Commission of India, Dr. H.N. Sethna, said, “...it (the nuclear test experiment) could be used for removing large quantities of earth and rock as well as in cracking of rocks underground for increasing oil and gas yields from certain types of formations and dimensions”. India’s representative to the Conference of the Committee on Disarmament (CCD), Mr. B.C. Mishra, stated in the conference held incidentally at the time of India’s nuclear test, “The Government of India has been, and remains, firmly committed to a policy of using nuclear energy for peaceful purposes, and, in that context,


5 Ibid., 22 May 1974; and


of studying and working on all meaningful applications of economic significance. The development of peaceful nuclear explosion technology is an integral part of that policy".  

India's Pokhran-I nuclear test in 1974 was single test, unlike its Pokhran-II nuclear test in 1998 was of series of five nuclear tests. Strategic community around the world wondered if it had any strategic significance or exit strategy. A prevalent assumption was that the ambiguity inherent in a single nuclear test might have been primarily to avoid inviting punishment of the super powers, like the US, from which India was receiving nuclear fuel on conditional basis, while gaining the attention of the super powers.  

The condition enshrined in the 1963 Indo-US Nuclear Agreement was that India should use the nuclear material only for peaceful purposes. According to observers a multiple nuclear tests by India would have strongly meant that India was on the definite weapons course. A multiple tests would have been difficult to provide peaceful rationale for purpose of the tests. However, the assumption came to be wrong when the US strongly suspected that the single nuclear test was not for peaceful purpose and strongly believed the test was for military purpose. The US belief was reinforced by the belief of all the other P5 countries, including the USSR, UK and China, except France, and majority of the other world countries that India's nuclear test was for weapons purpose.

**US Reactions to Pokhran-I Nuclear Test**

The Indian nuclear test apparently did not come as a complete surprise to the government of US, generally, and officials of Department of Atomic Energy and Department of State, particularly. The US knew for quite some time that India had the potential capability and intention of gearing the explosive force of the atom for its

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national purpose. The only thing that was not known to the US was as to how close Indian scientists were to conducting a successful nuclear test.

On the same day of the India’s nuclear test, Secretary of State, Henry Kissinger, reacted issuing a studied preliminary statement that reflected basically a non-proliferation tone broadly, without even referring to the word “India”. He stated, “The US had always been against nuclear proliferation for the adverse impact it will have on world stability. That remains our position”. Few days later, exactly same words were used to comment on India’s nuclear test in a statement issued by the US representative, Martin, in the Conference of Committee on Disarmament. Nevertheless, Kissinger sought to underplay the Strategic importance of the India’s nuclear test that was construed by the US as test for weapons purpose. He stated, “I do not believe that the Indian nuclear explosion changes the balance of power, though if India had asked for our advice we probably would not have recommended it... we are opposed to proliferation”.

The Secretary of State, James Schlesinger, said that the US might withdraw its commitment to protect India with nuclear weapons if the latter built its own atomic weapons. The White House spokesman, Gerald Warren, made it clear that there was no change in US Arms supply to either India or Pakistan, which were receiving arms assistance from the US.

Americans common reaction to the test was reflected by the “The Washington Post” that called the test the “height of irresponsibility” and said it would “aggravate Pakistan’s fears of Indian domination” in the sub-continent. In its editorial, on May 21,

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9 The Hindu (Madras), 19 May 1974; 29 May 1974.

10 Statement by the US Representative, Martin in the Conference of Committee on Disarmament, 21 May 1974, CCD/PV 637, 19.


12 Ibid., 22 May 1974.
the paper dismissed the "peaceful" intent of the test as "rubbish" and said it would license and strengthen in various other countries the internal forces clamouring for building nuclear bombs. "But the most disturbing aspect of India's achievement is that Mrs. Gandhi's Government could have chosen to spend on it tens, if not hundreds of millions of dollars that could have been so much better spent on the needs of the Indian people". The New York Times commented in its editorial, "The sixth member of the nuclear club may be passing the begging bowl before the year is out, because Indian science and technology so far have failed to solve the country's fundamental problems of food and population (explosion)... Such a great talent of resources have been squandered on the vanity of power while six hundred million Indians slid deeper into poverty". Another daily wrote mocking on the perception that India attempts to equate itself with the P5 countries. It read, "There are all those people everywhere who are neither Americans, nor Russians, nor Chinese, nor British, nor French and do not really want to be any of them. For those people that blast beneath the Rajasthan desert said simply; 'we are real people too... There are no lesser breeds..." At the same time it can not be said that there were no sections in the US that did not support India's nuclear test. Senator Hubert Humphrey said that the development of atomic energy production in India was an integral part of the nations long term economic programme as it was presently dependent on foreign sources for petroleum requirements. Among the media section the Christian Science Monitor justified the

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13 Comment quoted in, The Hindu (Madras), 22 May 1974.


blast putting a question editorially as to how anyone could really object if it speeds up the industrialization of the country.¹⁷

The US reaction to India's nuclear test could generally be characterized to be a mixture of feeling; primarily a feeling of anger that India had exploded a nuclear device through peaceful nuclear route; feeling of envy that India was the first developing country to explode a nuclear device exhibiting its technological competence, and lastly, a sense of contempt for diverting a poor country's valued resources away from increasing food production with the objective of rescuing millions of starving people to join the exclusive nuclear club of P5.

The US among other western nations suspected that India had found a new circuitry peaceful route through "Peaceful Nuclear Explosion" to attain nuclear weapons capability. Despite the feeling of aversion created in US on India's new concept of "Peaceful Nuclear Explosion", as it was perceived to be a death blow to the concept of "Atoms for Peace" policy, a day after India's nuclear explosion a high level American delegation including United States Atomic Energy Commission Chairman Dixie Lee Ray went to Tehran, Iran, to establish a major nuclear energy complex. A brief communiqué revealed that during the talks between the delegations of both the countries, they would examine the need for training and application of nuclear energy in industry, medicine, and agriculture and in desalting operations. An additional fact was that Canada and France, too, were competing to establish nuclear power stations in Iran.¹⁸ This incident exhibited that the US was keen on the commercialization of its technology even when there was uproar in the Congress that the US failed to stop the proliferation.

¹⁷ Quoted in, Motherland (New Delhi), 23 May 1974.

¹⁸ Kayhan (Tehran), 20 May 1974.
Origin of the Blast Material

While purpose of the India's nuclear test was debated in various sections of the American society, the US government was trying to solve a baffling question that arose immediately after the nuclear test - whose blast material it was? The US government cast shadow of doubt on the origin of the blast material, the plutonium, used for conducting nuclear test. The Indian government claimed that materials used for nuclear test was 100 percent Indian. The US government, however, contested this claim and believed India could not have carried out the nuclear test without using its facilities directly or indirectly. Earlier, a similar view was held also by Canada.

The Chairman of the Atomic Energy Commission, India, H.N. Sethna, stressing the indigenousness of the nuclear test stated, "A significant feature (of the test) is that the entire operation was done by our scientists and technicians" and claimed, "The materials used including the vital plutonium have been made in India... It was made at Trombay at the Bhabha Atomic Research Centre". 19

Doubts soon grew in the United States over this claim. However, it could not be evidently proved. The US Secretary of State, Henry Kissinger, casting shadow of the doubt on Canada as unknowingly contributing India's nuclear test and excluding the US from the contribution, stated: "The Indian nuclear explosion occurred with material that was diverted not from an American reactor under American safeguards but from a Canadian reactor that did not have appropriate safeguards". 20

His reference was to the Canadian assisted CIRUS reactor of India. 21 Also some non-proliferation scholars like Gary Milhollin, who occupied the position of consultant

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19 Interview with H.N. Sethna, n. 6.


21 The CIRUS reactor was built by India with the technical assistance of Canada under a 1956 contract and later India sought help from the US for heavy water since the required heavy water for the reactor was not manufactured by the Canada, which was still developing its own heavy water industry.
for the Nuclear Regulatory Commission from 1976 to 1986, firmly believed that even though India promised Canada and the US to restrict CIRUS to peaceful use and since the CIRUS was not covered by international inspection, consequently India tested a ‘bomb’ made with plutonium from CIRUS’s spent fuel and called it a “peaceful nuclear device”.

But the announcement of Kissinger denouncing that the US had contributed for the nuclear test could not convince the nonproliferation specialists and the opponents of Tarapur fuel shipments who strongly felt that India could not have carried out the nuclear test without misusing the spent fuel of American supplied fuel under the 1963 Indo-US Agreement. Non-proliferation advocates had condemned the US government for allegedly selling materials and equipment to India with inadequate or non-existent safeguards as the IAEA and its safeguard provision had not been established before the Indo-US Agreement for heavy-water supply signed on March 16, 1956. Their contention was that even though the blast material was made from the spent fuel of the CIRUS, a non-American reactor, the heavy water used in the CIRUS was American. In a bid to nullify this contention, the State Department officials pointed out that the heavy-water stock supplied by the US would have been finished by 1974. The State Department also stated that India’s self-reliance in heavy water production by 1974 had not only sufficiently served its products for running the CIRUS but also produced more than the sufficient amount of heavy water to stock, and even some of which had been leased to Belgium.

While the Chairman of Committee on Government Operations, Senator Ribicoff, sent seven questions to seek information from the State Department, on US - India nuclear cooperation, the Assistant Secretary for Congressional Relations, Robert J. McClosky in the State Department, had written to the Senator Ribicoff, “The United

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States sold 21 short tons of heavy water to India in 1956 under an Agreement... This quantity of heavy water met the moderating requirement of the CIRUS research reactor which began operation in July 1960 and achieved full power operation in 1963. Energy Research and Development Administration has indicated that heavy-water degrades at a rate of about 10 percent per year which would indicate that, even without deliberate substitution, the U.S.-supplied heavy water would have been totally replaced by about 1970.

"India has a small heavy water production plant operated in conjunction with a fertilizer plant at Nangal. This plant, which was built with German Assistance, began operating in 1962, and has a capacity of 15 short tons of heavy water per year. A heavy water reconcentration plant at Trombay began operating in 1965 and is capable of upgrading heavy water to 99.84 percent. Since the Nangal plant can produce in about one and a half years the requirements of the CIRUS reactor, it is believed that the US-origin heavy water was replaced from this source. The existence of excess heavy water in India during this period is borne out by the fact that it leased ten tons to Belgium."23

Since there was no taker for this view in the Congress, the State Department later altered this theory that India had mingled heavy water of the US origin with its own indigenously produced heavy water to run CIRUS in the sixties. This change in its statement was directed at silencing the opponents of the fuel shipments and advocates of non-proliferation by pointing out that even if the US government wanted to establish that some American heavy water remained in the CIRUS reactor in 1974, it could not be proved so with conclusive evidence. It was alleged that although Congress was outraged,

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23 Communication between the Assistant Secretary for Congressional Relations, Robert J. McClosky and Chairman of the Senate Committee on Government Operations, Abraham Ribicoff, Seven Questions and Answers on Nuclear Relations Between the U.S. and India, 02 June 1976.
the State Department did nothing to insist on any system for keeping track of US heavy water in Indian reactors.\(^\text{24}\)

It was believed that India had achieved nuclear explosive potentiality in the 1956 itself when APSARA, run by light water and medium enriched uranium had become critical and subsequently in 1959 when fuel fabrication metal plant started producing nuclear grade uranium adding to the nuclear explosive potentiality of India.\(^\text{25}\) However, there were variations as to when exactly India had attained capability to produce nuclear explosives. Some literatures on this subject suggest that India attained the capability in the 1960 itself when CIRUS reactor run by heavy water and natural uranium had become critical. Some other literatures on evolution of India's nuclear explosive capability suggest that manufacture of explosive device was made technically possible when the spent fuel reprocessing plant was completed at Trombay in 1964. Shortly after the completion of construction, India attained the capability to separate or extract plutonium, the core material to produce a nuclear explosive device, from reactor spent fuel in 1965, becoming the fifth country in the world to be able to extract plutonium from used fuel.\(^\text{26}\)

Logical suspicion of the contenders of India's this claim is that if India attained the capability to produce plutonium in the 1965 itself, why did it take almost 10 years to carry out its first nuclear test. There are combinations of events cited as reasons for the 10-years delay.

Indian nuclear explosives programme was actually launched in 1965 when Lal Bahadur Shastri headed the government. His untimely demise caused lack of political

\(^{24}\) Milhollin, n. 22.


stewardship towards the programme. Dr. Homi Bhabha, the father of Indian nuclear explosive programme, also died untimely. According to H.N. Sethna, had Dr. Bhabha been alive, the first nuclear test would have become a reality long ago. His death held up the experiment as his successor Dr. Vikram Sarabhai devoted most of his time for space and electronic research. And the political instability triggered by the appointment as Prime Minister of inexperienced and initially feeble Mrs. Gandhi also forced the shelving of the first nuclear test programme until 1974. Non-ready of precise statistical calculations on nuclear kinetic behaviour till 1972 also cited as a major reason for the delay. As few other literatures suggest that the precise statistical calculations on the kinetic behaviour required for necessary chain reactions that leads to nuclear fission or explosion was achieved only when the Purnima reactor went critical, maintaining a chain reaction that can sustain itself on 18 May 1972, precisely two years before India’s first nuclear test.

A former Director of Bhabha Atomic Research Centre (BARC) who was closely involved in the project, also was quoted as saying, the Purnima reactor “helped to benchmark calculations regarding the behaviour of a chain reacting system made out of plutonium. The kinetic behaviour of the system just above critical could be well studied. Very clever physicists could then calculate the time behaviour of the core of a bomb on isotropic compression”.

On the origin of the blast material, Dr. Sethna made it clear that the AEC scientists had not made use of plutonium available from the nuclear power plants at Tarapur and Rana Pratap Sagar in Rajasthan as they were under the Treaty obligation of Indo-US Agreement for civil nuclear cooperation and Indo-Canadian Agreement for civil

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27 The Hindu (Madras), 20 May 1974.


nuclear cooperation respectively. His references were to the two highly-enriched uranium (HEU) reactors of Tarapur Atomic Power Station that were imported from the US and to the Canadian deuterium-uranium reactors known as Candu reactors. He said, in fact, the plutonium used in the nuclear test had not been processed at all. The AEC scientists made use of the plutonium available from BARC at Trombay but not from the Trombay reprocessing plant established primarily to extract plutonium from the US-imported HEU reactors. In short, India said no US or Canadian material, technology etc., supplied to India was used for nuclear explosion.

However, the contention of American non-proliferation advocates was that India could not have carried out the nuclear test successfully without using American assistance directly or indirectly. In the two years after the nuclear test, these non-proliferation advocates laboured hard to find evidence to directly link the India’s nuclear test with American assistance and in mid-1976, they claimed, “U.S. engineering assistance, training and possibly a crucial U.S. chemical ingredient contributed to India’s 1974 atomic explosion.” But still it was not sufficient enough to prove firmly the linkage between the American assistance and India’s nuclear test.

**Did India Violate Indo-US Agreement?**

A wrangled controversy between India and the US from the very beginning of the India’s nuclear test was over the purpose of the India’s nuclear test and chastity of India’s commitment under it’s agreement with the US to use the American supplied fuel for peaceful purposes only. This controversy and subsequent interpretation of both the parties on the 1963 Indo-US Agreement for civil nuclear cooperation drove both India and the US to a political battle- -if not legal battle that would have cost dearly both the parties in

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30 The Hindu (Madras), 20 May 1974.

terms of their bilateral relations with each other—holding Tarapur fuel supply hostage to the US nonproliferation moves.

Understanding the 'civil use' nature of Indo-US Agreement for civil nuclear cooperation is sine qua non to understand the controversy and non-institutional, non-formal sanction of the US in terms of fuel suspension to India's Tarapur Atomic Power Station [TAPS] as a reaction to India's nuclear test.

One of the key provisions of the Agreement was the Clause A of the Article. It reads; "The parties to this Agreement emphasize their common interest in assuring that any material, equipment or device made available to the Government of India for use in the Tarapur Atomic Power Station, or in connection therewith, pursuant to this Agreement shall be used solely for peaceful purposes" [Emphasis added].

Clause A of the 'Article VII reads, giving an explanation to the Clause A of the Article VI; The Government of India guarantees that "No material, equipment devices transferred to the Government of India or authorized persons under its jurisdiction pursuant to this Agreement, by sale, lease or otherwise, will be used for atomic weapons or for research on or development of atomic weapons or for any other military purpose...".

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32 "The Agreement for Cooperation Between the Government of India Concerning the Civil Uses of Atomic Energy" was signed at Washington in August 1963 and it entered into force on October 25, 1963 after it had been submitted to the US Congress by President John F. Kennedy and to the Indian Parliament by Prime Minister Jawaharlal Nehru. The Agreement was to remain in force till October 24, 1993 for thirty years.


34 Ibid.
Even the Indo-US Agreement of 1956 on availing heavy water for the CIRUS reactor had a non-military-use clause. Clause 9 of the Agreement reads that 'The heavy water sold hereunder shall be for use only in India by the Government in connection with research into and the use of atomic energy for peaceful purposes, and shall be retained by the Government, or by other parties authorized by the Government to receive it, and not resold or otherwise distributed' [Emphasis added].

However, a vacuum both in the 1956 Agreement for heavy water supply and 1963 Agreement for fuel supply was that they did not provide a clear-cut provision that bared the use of the material for nuclear explosion that could be applicable both for peaceful purposes or military purposes. Nowhere, in both the agreements, explicitly or implicitly mentioned that any nuclear explosion, even for peaceful, should not be conducted. India utilized these lacunae of the agreements to conduct a nuclear explosion saying that the test was only for peaceful applications. Thus, after the nuclear explosion India declared that it did not violate any international agreement. But, before India's PNE, in the 1970 itself, the Unites States made it crystal clear that any nuclear explosion by India will be construed as nuclear test for military purpose. At the backdrop of various affirmations of India's interest, expressed by many quarters, in developing the technology of peaceful nuclear explosions and public debate on the nuclear issue as to whether, under 1956 and 1963 agreements for nuclear cooperation, India could legitimately use foreign-supplied nuclear technology or material to manufacture any explosive device for detonating a

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33 On March 16, 1956 the US Atomic Energy Commission (AEC) and the Government of India concluded an agreement for the sale to India of 21 short tons of heavy water. The heavy water was to be used as a moderator in a research reactor called CIRUS fuelled by natural uranium and set up with Canadian assistance in Indo-Canadian agreement in April 28, 1956 under the Colombo Plan.

36 U.S. Department of State, Agreement of March, 16, 1956, by and between the United States Atomic Energy Commission and the President of India for the sale of 21 short tons of heavy water, text of the agreement, as released by the Assistant Secretary of State for Congressional Relations on June 2, 1976.

37 Ibid.; and

Indo-US Agreement for Cooperation, n. 33.
peaceful nuclear explosion, in November 16, 1970, the US government presented Aide Memoire to Indian Government to clarify its position on peaceful nuclear explosion. The US wrote in its Memoire, “We believe the Government of India is aware of the American interpretation of agreements under which the United States has assisted India's development in the field of atomic energy. However, we would like to reiterate the American view in the interest of clarity and to obviate any misunderstanding.

“The American position, reflected in the Non-proliferation Treaty, is that the technology of nuclear explosives for peaceful uses is indistinguishable from that of nuclear weapons, and that any nuclear explosive device, though it be intended for benign economic purposes, could also be used for destructive purposes. The development of such explosives, therefore, is tantamount to the development of nuclear weapons. Any other position would be inconsistent with United States obligations under the Non-proliferation Treaty and the United States Atomic Energy Act”.

However, it is important to note that when India carried out the nuclear test, the US did not regard the explosion as a breach of either its 1956 or 1963 agreement with India. The aide memoire of 1970 was not even referred to give justifications of the US contentions that any nuclear test would “tantamount to the development of nuclear weapons”. The aide memoire was published only in 1980. Even when Ambassador T. N. Kaul's wrote in his letter of July 6, 1974 to Secretary of State, Henry Kissinger, that India did not use or divert Canadian material and in fact it used 100 percent Indian material, Indian technology and Indian personnel, it was not then contested by the Americans.

The reading of the US obligation under NPT was that if India conducts a peaceful nuclear explosion by using the material transferred by the US, it would amount to a

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violation of the NPT by the US as the Article II of the NPT prohibits "any transfer (by nuclear weapon states) to any recipient, (nuclear weapon states or non-nuclear weapon states) whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly". [Emphasis added]⁴⁰. The US, as a signatory to the NPT, should "not in any way assist, encourage or induce any non-nuclear- weapon State to manufacture or otherwise acquire nuclear weapons or other explosive devices, or control over such weapons or explosive devices".⁴¹ But no one among the signatories of the NPT said the US violated the NPT, probably because the parties to the NPT could not convincingly counter India's new concept of "Peaceful Nuclear Explosion". It exhibited the signatories of the NPT accepted, though reluctantly, India's concept of PNE. However, the US stuck to the position that any explosion—peaceful or non-peaceful—would be considered as explosion for weapons purpose.

Further, to give specific meaning to its interpretation, the Memoire added that as a consequence of the obligations under the NPT and US Atomic Energy Act, "the US would consider it [peaceful nuclear explosion] incompatible with existing United States-Indian agreements for American nuclear assistance to be employed in the development of peaceful nuclear explosive devices. Specifically, for example, the use, for the development of peaceful nuclear explosive devices of plutonium produced there from, would be considered by the United States a contravention of the terms under which the American materials were made available."⁴²

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⁴¹ Ibid.

The US clearly brought out the implied meaning of the incorporation of provisions of safeguards and provision of guarantees on the use of fissile material in the 1963 agreement. The Memoire cleverly interpreted, "the safeguards and guarantees provisions of the Tarapur agreement as prohibiting the use of American materials and equipment, or materials produced from such materials and equipment, or research on or development of any nuclear explosive devices regardless of stated applications."\(^{43}\)

And, to bolster the interpretations and arguments on peaceful use of nuclear material, the Memoire also quoted the peaceful-use-clause of 1956 agreement, cautioning India that "The United States would not consider the use of plutonium produced in CIRUS for peaceful nuclear explosives intended for any purpose to be "research into and use of atomic energy for peaceful purposes"."\(^{44}\)

Since India had already categorically stated that the material used for PNE was not made available from TAPS or CIRUS, and the effort were one hundred percent Indian using the indigenous technology, the US could say in no way that India violated its 1956 or '1963 Agreement with the US.

So, later the US had to accept India's claim. When the pressure for punishing India by cutting-off fuel mounted from many quarters, the US declared its judgment on legality of India's Peaceful Nuclear Explosion that India technically had not violated its agreements, signed with the US in 1956 and 1963 for nuclear cooperation. Therefore, cutting-off fuel supply to India was legally not possible. In one of his testimony to Congress in 1976 Secretary of State, Henry Kissinger, reinforced this view. While responding to a question about the US official reaction to India's nuclear explosion, he stated, "We deplored it strongly, and we have made it clear to India that we saw no need for it. We do not feel that the uses of nuclear explosives in India would justify the doubts

\(^{43}\) Ibid.

\(^{44}\) Ibid.
and insecurities that have been raised. We objected strongly, but since there was no violation of US agreements involved, we had no specific leverage on which to bring our objections to bear".\(^{45}\)

Though, India claimed to have tested the nuclear device for the peaceful applications like removing large quantities of earth and rock as well as cracking rocks understand for increasing oil and gas yields, literatures are hardly found to suggest India ever used it for the intended purpose, but at the same time, it is well known, India has never used its nuclear technology development for offensive purposes. So, whether India’s nuclear test had the actual intention of peaceful application or strategic application or of both is a question of interest. India’s PNE, at least, did not help for any actual peaceful application, but it only made India to suffer in terms of accessing foreign technology. The uncomfortable fact was that till India achieved its self-reliance, it suffered enormously from the suspension of foreign technology and assistance due to Pokhran-I test. As “India Today” concluded, “almost none of this would have happened if it were not for the Pokhran blast (Peaceful Nuclear Explosion), which in any case has not led to any new peaceful use of nuclear energy”.\(^{46}\)

The possibilities of using nuclear explosions for civil purposes were studied mainly in the US and also in the USSR. The US was examining, under the peaceful nuclear programme called plowshare, the feasibility of using nuclear explosions for exploiting oil and gas deposits, for opening up ore fields, for building water reservoirs in arid regions, for earth-moving operations in canal construction and so on. When the US conducted such peaceful nuclear explosive tests, the use of such tests in the peaceful applications was largely theoretical and although much useful data has been obtained

\(^{45}\) Communication between the Assistant Secretary for Congressional Relations, Robert J. McClosky and Chairman of the Senate Committee on Government Operations, Abraham Ribicoff, n. 23.

from test explosions, none of the projects under investigation had yet reached the stage of wide practical application, because the danger of subsequent radioactive contamination of the environment was very real and the problem of designing a "clean" explosive was unresolved.⁴⁷

So Indian PNE conjured up to the Americans, the media and policy makers, the image of testing nuclear bomb for the purpose of weaponisation. But, the irony was that the US Atomic Energy commission also had pursued for seventeen years the PNE called "Plowshare" that involved experiments in the peaceful applications of nuclear explosives, despite findings of many studies that suggested the impracticability of using such peaceful nuclear explosions in peaceful applications. The US had identified two categories of PNE, namely excavation-shots, which were exploded at or close to the earth’s surface to dig canals and harbours, a contained-shots for deep mining and releasing gas and oil deposits. India's test was classified in the second type of contained-shots.

American policy analysts greeted with derision the self-developed idea of a "peaceful bomb" and quickly equated the test for weapons purpose also because India was the first country to announce that the nuclear test was for the peaceful purpose without actually going through the weaponisation programme. The nuclear weapons states in the first step tested nuclear device for the weapons purpose and then only in the second step went for the peaceful applications of the nuclear programme. The US basically could not believe that the Indian test could be for peaceful purpose as it found India's case a strange one. The perception of the nuclear weapons states over the nuclear programme was conditioned by the fact that most nuclear countries had perceived the nuclear energy only in terms of military uses and as a result they found it very strange to

accept that there was any country which had the capacity and which could wish using it for peaceful development purposes.

Indian scientists, diplomatic officials repeatedly stated also that the test was a Peaceful Nuclear Explosion and it violated no international treaty or agreement as 1963 Limited Test Ban Treaty and 1968 Nuclear Non-proliferation Treaty permitted the concept of PNEs. The 1963 Limited Test Ban Treaty accepted underground explosions as they do not cause “radio active debris to be present outside the territorial limits of the state under whose jurisdiction or control such explosions is conducted”.

Article V of the NPT implicitly recognizes the PNE in its reading, “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-weapons states party to the Treaty. [Emphasis added]

Thus, India declared that it did not violate its commitment with the US agreements and international treaties. However, the US position was that though India had not violated technically or in letters its commitment under the 1963 Agreement and 1956 Agreement, it had well violated them in spirit.

**Fuel Suspension: The Rudimentary Non-proliferation Sanction**

The differences between the US and India tightly remained over the purpose of the test, source of the nuclear material, technology etc., for the test and, consequently, over the legality of India’s nuclear test under the 1963 Indo-US agreement for nuclear cooperation and 1956 Agreement for heavy water supply to India, both of which needed India to use the nuclear assistance only for peaceful uses. While both the parties tightly stuck to their positions, in one of its concrete action against India, the US stopped the

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49 The Nuclear Non-Proliferation Treaty, n. 40.
loans provided by International Development Association by voting against approving any loan to India.⁵⁰

In the case of Pokhran-II nuclear Test, section 102(b)(2)(E) of US Arms Control Act or Glenn Amendment, which is a resultant of Pokhran-I nuclear test required the US to exercise "Opposition in accordance with section 706 of the International Financial Institutions Act, the extension of any loan or financial or technical assistance to the target country by any international financial institution".⁵¹ But at the time of India's first nuclear test, the Pokhran-I test, in 1974, there were no such statutory provisions for the US to impose sanctions.

Without this kind of statutory provisions for invoking sanctions, the US voted against loans to India at the International Development Association and it amounted to a sanction that was non-institutionalized one.

Pressure from various quarters, particularly from the Congress, was mounting and suggestion was pouring in that the US administration cut-off fuel supply to India as punishment for its deed. But, since India's deed did not overtly and plainly violate the letter of Agreements of 1963 and 1956 the US could not go for formal cutting off of fuel supply, as it would amount to violation of 1963 Agreement on the part of the US.⁵² Clause A of Article VI of the 1963 Indo-US agreement for nuclear cooperation emphasizes that "any material, or equipment or device made available to India ... shall be used solely for peaceful purposes". Clause D of the same Article reads; "In the event of non-compliance with the guarantees or with the provisions of this Article, and the subsequent failure of the Government of India to fulfill such guarantees and provisions

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⁵⁰ Leonard S. Specter, "Proliferation-The Silent Spread", Foreign Policy, No 58, Spring 1985, p. 60.


within a reasonable time, the Government of the United States of America shall have the right to suspend or terminate this Agreement and require the return of any equipment and devices transferred under this Agreement and any special nuclear material safeguarded pursuant to this Article," significantly meaning a fuel cut-off to the Tarapur reactor in case of violation of peaceful clause of this Article. India categorically and repeatedly stated that the nuclear test conducted was for the peaceful purposes naming the test "Peaceful Nuclear Explosion" (PNE) and the US could not effectively reject this Indian claim as the US could not convincingly find any violation of the Clause A of Article VI and could not go for cutting off the fuel as per the Clause D of the same Article.

Moreover, any decision to impose sanctions would have cost not only on India but on the United States as well as the instrument of sanction is double-edged sword. And since there was no financial interaction and military sales between India and the US after the suspension of all American aid and military supply in the wake of the 1971 Indo-Pakistan war, practically sanction was impossible against India, even if there existed legal grounds for imposing non-proliferation sanctions.

Critics of India’s nuclear policy and the US nuclear export policy were clamouring for punishment for India’s PNE, not because they believed that they can roll back or undo the situation created by the PNE; it was to send a strong message to the potential would-be proliferators who might now tend to adopt the route of PNE to nuclear weaponisation, as was the case in Pokhran-II sanctions, where one of the purposes of the sanction was to send a strong message to potential proliferators. Therefore, without going for a formal cutting-off of fuel under a statutory provision for sanctions, the US went for suspension of the fuel to the Tarapur Atomic Power Stations, as a punishment to the

\[53\] Indo-US Agreement for Cooperation, n. 33.

\[54\] Wohlstetter, n. 52.
India's nuclear test on the premise that India violated, at least in spirit, "peaceful-use-clause" of 1956 and 1963 Indo-US Nuclear Agreements. Thus, for the first time, a rudimentary non-proliferation sanction regime was introduced by the suspension, if not a complete ban, of a nuclear material to a foreign nation in retaliation to a nuclear test by that nation.

As already seen, even though, a formal sanction was not imposed due to a lack of statutory provision, such an imposition of sanction, the fuel suspension, had the same basic elements of a formal fuel cut off or sanctions such as demands or objectives to be achieved and punishment on the target state as a stick to beat the target state to comply with the demands, and incentive as a carrot to persuade the target state to meet the demands.

This suspension of fuel was against the 1963 bilateral agreement, as the US failed to fulfill its contractual obligation to supply the fuel "as needed" by India. As per the Agreement the US was required to supply the fuel as and when India required it without delay. The US could not cut off fuel on the pretext that India violated its contractual obligation that India should use the fuel for only peaceful purposes. Because India claimed the tests was for peaceful purpose. When the fuel was suspended it was never clearly mentioned as a "cut-off", as mentioning so would have been illegal as per the Agreement. The US basically employed delay tactics; the US never said it was cutting off the fuel, but demanded certain action from India and until then the US would delay the shipment of the fuel.

Demand of Peaceful Use Assurance And IAEA Verification

After the suspension of the fuel, five shipments of slightly enriched uranium for Tarapur became dues for a period of around one year, from June 15, 1974 to April 1,
Then the US Atomic Energy Commission cleared only one Shipment of fuel, keeping the remaining four shipments due. The US demanded India to perform certain actions in tune with the US nuclear non-proliferation policy. The chairman of the US Atomic Energy Commission, Dixy Lee Ray, in her letter to Sethna put up demands in a form of requisition that India confirm or ratify two understandings, expressed by the US representative to the IAEA Bureau of Governors on June 12, 1974, prior to the date of the next Scheduled portion of the Shipments. Otherwise, “it (Atomic Energy Commission) will take no actions”, which are inconsistent with the two understandings.

Here, the demands or objectives of the US to be achieved are that India does “confirm” understanding of the US. For this fuel suspension was held hostage or use as a “stick” to beat India with. Those two understandings or conditions are:

“(1) that the use in or for any nuclear explosive device of any material or equipment subject to United States agreements for cooperation in civil uses of Atomic Energy is precluded; and

(2) that under the safeguards agreements related to such Agreements for cooperation the IAEA is responsible for verifying, inter alia, that the safeguarded material is not used in or for any nuclear explosive device”. 56

Out of five suspended shipments of fuel, only one shipment was sent to India holding the remaining four as hostage for meeting the two demands. This reflected the “carrot” approach of sanction. “The United States Government has permitted this initial part of the shipment to proceed only on the basis of the forgoing understandings and on the assumption that the Government of India will respect these understandings”. 57


56 Ibid.

57 Ibid.
It could be inferred that the initial or first shipments was to mean as an incentive or "carrot" to India for adhering to the US "understanding" that the use of US special nuclear material for nuclear explosive device be precluded. This basically was in tune with the US nuclear non-proliferation policy.

In a reply letter to Dixy Lee Ray, Dr. Sethna rejected the US conditions by saying, "The government of India regrets that it is unable to share the understanding of the United States Government". Assuming that the US Atomic Energy Commission put the conditions by interpreting the 1963 Indo-US Agreement, Sethna added in the letter, "The Government of India is of the opinion that this understanding does not flow from the Agreement, for Cooperation between the two Governments concerning the Construction and operation of the Atomic Power Station at Tarapur". Dr. Sethna assumed in his letter that Dixy Lee Ray's letter implied that "the US Government wishes to incorporate changes in the existing Agreement".

Dr. Sethna's reply letter to Dr. Dixy Lee Ray reflected sanctions-like pressure felt by India as well as India's attempt to build a tacit pressure on the US to resume the suspended fuel shipments to the Tarapur Power plant.

The sanctions-like pressure on India was built by two factors: (i) The US suspended five Shipments of fuel causing the temporary closure of the Tarapur plant; and (ii) India could not go for an Alternate fuel Supplier as India is legally bound not to avail special nuclear material from any other country according to the Article II of 1963 Indo-US Agreement which was also reflected by Dr. Sethna's reply letter to Dr. Dixy Lee Ray.

When the US suspended the fuel shipments to Tarapur Atomic Power Station after India's nuclear explosion bowing to the Congressional pressure and Public pressure

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58 Letter of July 10 1974, from Dr. Homi N. Sethna, Chairman of Indian Atomic Energy Commission, to Dr. Dixy Lee Ray, Chairman of the US Atomic Energy Commission.

59 Ibid.

60 Ibid.
for punitive action against India, five shipments of fuel to India had become due from June 1974 to April 1975. India realized that a prolonged suspension of fuel shipments or delaying of shipments shut down Tarapur causing a severe power crisis in the Maharashtra-Gujarat region which the Tarapur Atomic Power Station was primarily meant for. TAPS, to cover the country’s leading industrial region already wracked by power shortages, generated more than ten percentage of the electricity supply to the western grid.  

A portion of Dr. Sethna’s reply letter to Dr. Dixy Lee Ray, exhibiting the sanctions like pressures built on India, expressed the inability of India to go for an alternate fuel supplier because of legal constraints enshrined in the Article II of 1963 Indo-US Agreement. He reminded the same Article in his letter that reads, “... the Tarapur Atomic Power Station shall be operated on no other special nuclear material than that made available by the United States Atomic Energy Commission and special nuclear material produced there from”.  

The pressure felt by India could implicitly be understood also by Dr. Sethna’s readiness in returning special nuclear material produced in TAPS to the US as he believed that it could alleviate the fear of the US, generated by the suspicion that special nuclear material produced in TAPS might be diverted by India for further nuclear device test. In the same reply letter he mentioned, “I would like to draw your attention to clause F of Article II of the Agreement for cooperation under which the United States Government has the first option to purchase the special nuclear material produced in the Tarapur Atomic Power Station which is in excess of the need of the Government of India for such material in its programme for the peaceful uses of atomic energy. I would also like to state that the Government of India is prepared to return to the united States

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62 Letter of Sethna to Ray, n. 58.
Government special nuclear material produced in Tarapur Atomic Power Station at a mutually agreed price except a quantity which could be required for cycling in the Tarapur atomic Power station as provided under Clause A of article II, the amount being arrived at after mutual consultations. 63

By saying that India is prepared to return to the US special nuclear material produced in TAPS, except a quantity which could be required for recycling in the TAPS, India implicitly conveyed an assuring message to the US that it will not use the concerned material for any other purpose, including the PNE that, India had been repeatedly claiming, was with in the purview of the “peaceful-use-clause” of the 1963 Indo-US Agreement.

The pressure felt by India became obvious in the Indian Ambassador, T.N. Kaul’s letter that accompanied Dr. Sethana’s reply letter to Dr. Dixy Lee Ray. In his accompanying letter Mr. T.N. Kaul wrote, “I sincerely hope that the material urgently required by the Tarapur plant will be cleared by the State Department without delay, as the Plant has had to be temporarily closed for want of such material. Further discussions will be held between our two Atomic Energy Commissions for the further collaboration in this regard, but it is urgent that the functioning of the Plant should not be held up until such discussions are held.” 64 And to pacify the US, he added in his accompanying letter that, “We had signed with regard to the Tarapur Plant and that we would abide by the same”, hoping that it will be enough to get the “material urgently required by the Plant” cleared form the US. 65

While Dr. Sethna’s reply letter could not conceal the pressure felt by India owing to the suspension of fuel, it primarily but implicitly tried to exert a tacit pressure on the

63 Ibid.

64 Accompanying Letter of Indian Ambassador to the US, Mr. T.N. Kaul, Accompanied the Reply Letter of the Chairman of US Atomic Energy Commission, Dr. Dixy Lee Ray on 18th July 1974.

65 Ibid.
US to resume the fuel supply by reminding the US its obligation under the 1963 Indo-US Agreement. Third point of his reply letter reminds the US that, “Under Article II of the Agreement, the United States Atomic Energy Commission has contracted to sell to the Government of India all requirements of enriched uranium for use as fuel at the Tarapur Atomic Power Station...” 66 As per the Clause A of the Article III of the Indo-US Agreement, the US was obliged to sell the fuel to India “as needed” by India, meaning the US was required to supply the fuel as and when India required it without delay. 67

To sum up the analysis on Dr. Sethna’s reply letter and T.N. Kaul’s accompanying letter, apart from the plain message that India was unable to share the understanding of the US on preclusion of using any US material for nuclear explosive device by India and verification of this through safeguards, at least three underlying message could be read in both the letters; India felt the sanctions-like pressure owing to the fuel suspension of the US in reaction to the India’s nuclear test, India was pushed by the suspension of fuel to an extent of showing readiness to give up the privilege of using the spent fuel or special nuclear material in any aspect of its programme for the peaceful uses of atomic energy, including the India’s concept of PNE, and, India exerted a tacit counter pressure on the US to end the fuel suspension.

After two months, on September 16, 1974, Dr. Dixy Lee Ray responded to Dr. Sethna’s reply letter implying Dr. Sethna misunderstood the “nature of assurance” the US needed. Dr. Dixy Lee Ray in a clarifying tone added, “what we ask is simply written assurance from your Government that the special nuclear material that has been, or is hereafter made available for, or used or produced in, the Tarapur Atomic Power Station will be devoted exclusively to the needs of that station unless the two Governments

66 Letter of Sethna to Ray, n. 58.

hereafter specifically agree that such material be used for other purposes” (emphasis added).  

On the next day itself on September 17, 1974, Dr. Sethna replied to Dr. Dixy Lee Ray giving necessary undertakings. Dr. Sethna wrote, “The Government of India would like to reassure the Government of the United States of America that the special nuclear material that has been or is hereafter made available for, or used, or produced in the Tarapur Atomic Power Station located at Tarapur will be devoted exclusively to the needs of that station unless our two Governments hereafter specifically agree that such material be used for other purposes” (emphasis added).  

In the second letter also the message the US wanted to convey India was same as in the previous letter that India should stop any more new nuclear tests. Since a tacit pressure was built by India on the US on legal grounds of the 1963 Agreement, the language was softened in the second letter but implying the same message of the “understanding” on preclusion of any nuclear explosive device using any material or equipment subject to Indo-US Agreement. However, the second letter had not touched upon the second demand of the first letter that India confirmed that IAEA would be responsible in carrying out verification.  

The letter effectively, but implicitly, attempted to preclude use of special nuclear material or equipment of the US outside the TAPS for any other purpose, meaning preclusion of testing of nuclear explosive device that could practically be carried out only outside the station. By promptly agreeing to give the kind of assurance asked by the US, India had in effect given up its right under Article II (F) of the agreement to use special nuclear material.

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69 Letter of the Chairman of Atomic Energy Commission of India, Dr. Homi N. Sethna, Sent to the Chairman of US Atomic Energy Commission, Dr. Dixy Lee Ray on 17 September 1974.
nuclear material produced in TAPS in any aspect of its “program for the peaceful uses of atomic energy” at any place not only at the TAPS.

Though India had been claiming it had rights under the 1963 Agreement to use the nuclear material in “any aspects of peaceful use”, India now agreed not to use it for further nuclear test, peaceful or weapons test. This goal or demand neither flew from the 1963 Agreement, with a strict interpretation of it, nor from any international nonproliferation treaty India signed with. India assured not to use US-origin special nuclear material for explosive purpose as this demand to some extent flew from the bilateral agreements in tune with the US interpretation.

In this case the US successfully attained the goal of deterring India, a non-nuclear weapon state, from conducting additional nuclear test. And in tune with its non-proliferation objectives, the US also succeeded in its goal of preventing India from exporting its PNE technology to any other non-nuclear weapon states. Because, a refusal by India on non-conducting of further nuclear test or on non-transfer of India’s peaceful nuclear technology would have cost the power production of TAPS, as fuel supply would have been cut-off by the US. It proves that when the demand / objective of the sender is not costlier than the punishment at stake [impending punishment], the target country would concede to particular demands, making the case of the sender successful.

The assurance given “was the result of a political deal between the two governments”,\textsuperscript{70} not a legal deal, as there was no scope for this legal deal under the 1963 Agreement. Though the Indian assurances \textit{per se} were not legally binding on India, as they did not flow from any agreement or treaty, India had to be bound by them politically to avoid further confrontation with the US and to avail the necessary fuel for continuous functioning of TAPS.

Thus, India was prepared to accept the US non-proliferation demands for exigencies in order to avoid further delay in receiving fuel from the US, as it would have caused further damage to the already-reduced power production by the TAPS. The US resumed the pending five shipments of fuel supply to India.

The resumption of fuel supply to India not only helped the US administration to achieve its non-proliferation goals in India, but also to help silencing the opponents of fuel supply in opposition quarters and with in the party by convincing them that the US objectives would be better served by maintaining the non-proliferation controls incorporated in the Tarapur agreement and in the new Indian undertaking of assurances through continued supply of fuel rather than suspending fuel to TAPS and losing those advantages.\(^{71}\)

**Desai’s Peaceful Use Announcement**

In late 1974, the Nuclear Regulatory Commissions (NRC) replaced the Atomic Energy Commission. The NRC was set up by the Energy Reorganization Act of 1974 as an “independent regulatory” body. The statute also created the Energy Research and Development Administration. Some of the AEC’s functions went to ERDA while all the licensing and related regulatory functions were transferred to the NRC.

Not much time was required for the eruption of second episode of the fuel supply issue. After the fuel supply of four controversial shipments in 1975, in the same year two more applications were sent to the Nuclear Regulatory Commissions to keep more fuels in reserve to facilitate continuous functioning of the TAPS without any interruption that may be caused by lack of fuel as it happened in the year 1974 as well as 1975. The two applications were also delayed beyond the normal limits of the time because of the intervention of public interest groups and environmental groups for the first time in the

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\(^{71}\) Ibid., p. 50.
history of process of US nuclear export license application in 1976. However, realizing the urgency involved in the continuous fuel supply for continuous operation of the TAPS, the concerned groups including the NRC, the Department of Justice and Public Interest groups, who intervened in the processing of fuel export licence applications to preserve the public interest, agreed not to block the first shipment.

But a disagreement that arose within the NRC could not be suppressed. When the NRC decided to clear the first application for fuel export, a dissenting view that was aired by a member was revealed. In the end the fuel export licensing application could be cleared as three members out of total four members favoured the immediate licensing of the application with one member opposing it.

Function of the 'threat of sanction' was at display in the process of license approval of the second application in 1975. India’s realization that any hard posture would invoke cutting-off fuel supply to TAPS, causing a starvation of TAPS, made India to adopt a soft posture agreeing to the US non-proliferation principles.

The second application, which was also filed in November 1975, was cleared by the NRC, only after nineteen months in June 1977 when the Department of State issued green signal stating the proposed licence would not be inimical to the common defence and security of the United States. This green signal was obtained by India only after the Indian Prime Minister Moraji Desai had "voiced his opposition to nuclear weapons and

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Indian policy not to use nuclear energy for military purposes". Sensing the vigour with which the US was pursuing its nonproliferation effort through multilateral arrangements like NSG and Reprocessing Evaluation Programme under Gerald Ford Administration, in 1977, the Prime Minister Moraji Desai made his disavowal to Pokhran test known in the Parliament, by stating, “It is Pokhran which created all this trouble, and without our gaining anything. If it had gained us something, I would have been very happy. That is why they [the US] are asking now for safeguards. They believe it is only for weapons and nothing else...I do not believe that Mrs. Gandhi wanted to use it for any weapon purposes, even when she made the explosion. It was made for political purposes, if I may say so, and no other purpose. It did not advance any knowledge. I am getting all that material which is stored in cupboards, signed and sealed. I am trying to go through it and ...find out what good it has done to us. Nobody knows yet, after all these years”.

It shows that the US administration was quietly waiting to get this kind of non-proliferation concession from India.

After the application was filed in November 1975, the second fuel shipment approval was held up first by the Ford Administration and then by the Carter Administration on the specious plea that the United States was evolving a new nonproliferation policy. Even this specious plea was not flowing from the 1963 Agreement, as it did not say anything about incorporating new regulations in the fuel shipments, even if there was any new change in the US non-proliferation policy. As per the Article XI of 1963 Agreement, during the term of the 1963 contract it was possible that the applicable domestic laws or policies of the United States of America with respect


to only ownership and supply of special nuclear material for use by the seller's domestic
distributes may be changed, not with respect to the licensing of application. In fact,
“nothing contained in this Article XI shall affect the obligation of the seller to sell at the
commissions published charges and that of the purchaser to purchase all of the
purchaser's enriched uranium requirements for Tarapur Atomic Power Station”.78

Also, Article 27 of the Vienna Convention on the Law of Treaties, 1969, says, “A
party may not invoke the provisions of its internal law as justification for its failure to
perform a treaty”. This merely declares an established principle as does Article 60 (1): “A
material breach of bilateral treaty by one of the parties entitles the other to invoke the
breach as a ground for terminating the treaty or suspending its operation in whole or in
part”. Article 2 (1) (a) defines “treaty” to mean, “an international agreement concluded
between States in written form... whatever its particular designation”. While this is the
case for an established internal law, the US can not hold up for an evolving internal
policy.79

Demand of Technology Restraint and Additional Safeguards

The State Department had asked the NRC to halt further consideration of the
licensing application for exporting fuel to India.80 The State Department was keen to
“enter negotiations with the Indian government on one of the central issues focused on
during the hearings. Whether it would be desirable from a non-proliferation standpoint
and possible, practically and diplomatically, to reach an agreement with the Indian
government that all spent nuclear fuel generated at the TAPS facility be returned to the

78 Indo-US Agreement for Cooperation, n. 33.


80 United States Nuclear Regulatory Commission, n. 75.
United States. According to a secret State Department memorandum of August 19, 1975, Ambassador Moynihan and his successor William Saxbe had conveyed to the Prime Minister in 1974 and 1975 itself a list of steps India could take to ensure that its nuclear programme did not proliferate the nuclear technology. According to the memo, India had informally indicated that it would not export nuclear explosive technology. But India avoided engaging the American ambassadors on the questions of applying safeguards to additional facilities and coordinating nonproliferation policies with other nuclear technology suppliers. Moraji Desai’s Government in India showed non-proliferation concession conveying its disavowal to Pokhran-I test and nuclear weapons, but firmly rejected additional safeguard provisions on all the nuclear facilities and returning of all the spent fuel to the US. This minimal nonproliferation concession was achieved by the US again through a threat of fuel suspension. The threat of fuel suspension basically possessed the rudiments of the instrument of sanctions; the threat of imposition of sanctions, like an actual imposition of sanction, is a mean to achieve stipulated objectives of the sanctioner / sender in the target state.

It was revealed in the NRC order that the Carter Administration had threatened India that under its new nuclear export policy it would in the future not be able to continue nuclear cooperation with a non-weapons state that detonates a nuclear explosive device. The Commission stated: "This step has put the Indian government on unequivocal notice that, even if India explodes a weapon arguably constructed with entirely indigenously produced materials, utilizing technology not directly received from the United States, United States government has announced its intention to terminate the supply of fuel to Tarapur". It basically meant that the United States would cut off fuel

81 Ibid.
82 Perkovich, n. 76, p. 193.
supply, in spite of its legal obligations under binding agreement, if India carried out another nuclear test. This was one of the reasons why India, particularly the Indira Gandhi Government, assumed cautiousness in exploding or conducting additional nuclear tests. The NRC's processing of Indian applications for fuel supply and its views and decisions during each and every application laid the foundation of the US strategy to employ Tarapur's fuel licensing requirements as a weapon against India for gaining nonproliferation concessions from India.

Thus, while already the fuel suspension to Tarapur Atomic Power Station introduced a rudimentary nonproliferation sanction, the India's nuclear explosion in 1974 provoked robust debates in the US executive and legislative branch leading to conviction that there was a need to formulate tougher domestic restrictions and safeguard controls on export of nuclear materials, equipment and technology and to take strong actions to lead to establishment of more stringent international non-proliferation regimes to control the spread of nuclear weapons, with sanctions provisions.