

**THE NUCLEAR HAVES AND HAVE NOTS :
EXISTING INTERNATIONAL ORDER UNDER
NON-PROLIFERATION TREATY REGIME**

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C E R T I F I C A T E

This is to certify that the disseration entitled "The Nuclear Haves And Have-Nots : Existing International Order Under Non-Proliferation Treaty Regime", being submitted by Mr Dasari Shyam Babu, in partial fulfilment of requirement for the award of the Degree of Master of Philosophy in this University, is a record of the student's own work, carried out by him under my supervision and guidance.

It is hereby certified that this work has not been presented for the award of any other degree or diploma.

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This study is an attempt to describe the relations between "nuclear haves" and "have-nots" under the Non-Proliferation Treaty Regime. The NPT itself divides nations into two categories, i. e., Nuclear Weapon States (NWS) and Non-Nuclear Weapon States (NNWS). Those States which tested a nuclear bomb prior to 1 January 1967 are called NWS by the NPT. The US, the Soviet Union, the United Kingdom, France and China come under this category and other nations are termed as NNWS. However, those States which refused to sign the NPT are, in this dissertation, called NNWS, hence "nuclear have-nots". They include Argentina, Brazil, Israel, South Africa, Pakistan and India.

In the first chapter the origin and salient features of the NPT regime are discussed. Though the NPT was signed in 1968, the nonproliferation philosophy was first revealed in the Baruch Plan in 1946. The Baruch Plan also, just like the NPT, had proposed to prevent the future development of nuclear weapons while ignoring the existing ones. As the time passed, the NPT regime has been "strengthened" by including certain punitive components such

as the US domestic laws (NNPA of 1978 etc) affecting that country's aid policies and the guidelines of the London Club of Nuclear Suppliers. The second chapter identifies the "nuclear haves" as an organized group interested in preventing the horizontal proliferation of nuclear weapons, and their respective national interests that create friction among them. Five Nuclear Weapon States and members in both the military alliances are treated as the "nuclear haves". Japan is also included in this list. Though Pakistan seems to be thinking that it belongs to the Western Alliance, it is included in the "have-nots" category since that country's security is not guaranteed by the Western nuclear umbrella.

The third chapter discusses the politics of "nuclear have-nots". Unlike the "nuclear haves" the "nuclear have-nots" are divided in many ways and are unable to present a common front. Not only their interests but also their perceptions are also divided. When a "have-not" State wants to enter the nuclear club it is confronted with resistance from the "nuclear haves" as well as from fellow "nuclear have-nots". The fourth and concluding chapter briefly discusses the politics of safeguards. The nuclear safeguards are meant for making it sure that the NNWS signatories to the NPT are fulfilling

their treaty obligations. The criticism against safeguards is that they are applied to States which renounced their right to go nuclear by signing the NPT, while non-signatories to the Treaty cannot be constrained by legal barriers from going nuclear.

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CHAPTER I

CHAPTER I

INTRODUCTION

On 16 July 1945 the world entered into the nuclear era. The United States conducted the first atomic device on that day in the New Mexico desert. Within one month, i.e., on 6 August and 9 August 1945 the people of Hiroshima and Nagasaki became the victims of nuclear weapons respectively. Every innovation in the fields of science and technology enhanced both the possibility and lethality of war and made it more costly, in terms of human lives as well as the destruction of civil society.

The nuclear weapons present only one alternative to the humanity - either to abolish war as an instrument to achieve whatever goals a nation likes to pursue or to prepare for the total annihilation of the humanity. Following the US breakthrough in this field, the Soviet Union needed little rationale to produce the bomb since its arch rival was in possession of these weapons. The Soviet Union conducted its first atomic test in 1949.

The United Kingdom wanted to make the bomb as it thought that nuclear weapons would provide it with

a deterrent capability against USSR and a leverage to deal with the US. Harold Macmillan told the British people that "the fact that we have it (the A-bomb) makes the US pay a greater regard to our point of view".¹ France at least wanted to go nuclear for having parity with its traditional rival, Britain and to resist the Anglo-American alliance to humiliate it. The UK exploded its first nuclear device in 1952 and France in 1960. Until it exploded its first nuclear bomb in 1964, the Communist China was at the receiving end of the American nuclear threats and its relations with another nuclear giant, the Soviet Union began fast deteriorating. Hence, China joined the Nuclear Club in 1964.

The US Efforts to Curb Proliferation

Before dealing with the Nuclear Non-Proliferation Treaty Regime on the international order, it would be proper to present a brief sketch of the events led to the establishment of the regime.

In the US Manhattan project to produce the nuclear weapon it spent \$ 2 billion and employed 125,000 personnel to produce 'Little Boy' and 'Fat Man' that were dropped on

¹ Robert E. Osgood, NATO : The Entangling Alliance (Chicago: The University of Chicago Press, 1962), p. 243.

Hiroshima and Nagasaki. Hence the United States first tried hard to keep the monopoly on the bomb or slow-down the phase of its dissemination, if possible. Following the destruction of two Japanese cities, President Harry S. Truman said, "We have spent \$ 2 billion on the greatest scientific gamble in history - and won."² At the same time he pledged to take two prompt steps: (a) to set up government control over the atomic activities, and (b) recommend to the Congress "as to how atomic power can become a powerful and forceful influence towards the maintenance of world peace".³

Notwithstanding its good intentions, policies of the US to curb the spread of the bomb, in fact, encouraged its proliferation. The US Congress finally adopted McMahon Act in late July 1946, according to which the Atomic Energy Commission was to comprise only civilians (until then the military dominated the decisions on this field as well as their implementation). Second, secrecy was to be maintained. The third and most important feature of the Act was that it prohibited "exchange of information with other nations with respect to the use of atomic energy

2 The Time (New York), vol. 46, no. 7, 13 August 1945, pp. 66-67.

3 Ibid., pp. 17-18.

for industrial purposes".⁴

The UK and France felt betrayed since their contribution in the famous Manhattan Project was considerable. Britain even called back its scientists from Canada and determined to produce its own bomb.⁵ Though the US takes pride in the Manhattan Project, many a celebrity who worked in it were emigrants from Europe. Among them were Enrio Fermi (Italy), Leo Szilard and Edward Teller (both Hungarian).

The McMahon Act was contrary to the bilateral agreements reached by the US and the UK in 1943 and 1944. According to the Quebec Agreement of 19 August 1943, Anglo-American Declaration of Trust of 13 June 1944 and Roosevelt-Churchill Hyde Park Aide-Memoire of 19 September 1944, mutual cooperation in the atomic field was to continue after the Second World War "unless and until terminated by joint

4 Bertrand Goldschmidt, The Atomic Complex: A World-wide Political History of Nuclear Energy (Illinois: American Nuclear Society, 1982), pp. 85, 86; For the text of the Act see, Robert C. Williams and Philip L. Cantelon, The American Atom: A Documentary History of Nuclear Policies from the Discovery of Fission to the Present, 1939-1984 (Philadelphia: University of Pennsylvania Press, 1984), pp. 79-92.

5 Peter Bunyard, Nuclear Britain (London: New English Library, 1981), p. 28.

agreement".⁶

The American effort to persuade the Soviets not to produce the bomb - the Baruch Plan - was summarily rejected by the latter. During the initial months, the Americans were confronted by many questions as to how to limit the spread of this destructive knowledge and manage their relations with the Soviets.⁷ The sharing of the atomic bomb with Russia was opposed by many in the US. According to the Secretary of War, Henry L. Stinson, it would "stimulate feverish activity on the part of the Soviets toward the development of this bomb".⁸

Baruch Plan and Gromyko Reply

In March 1946 the US introduced its first 'non-proliferation' policy that was to influence the world order for the rest of the twentieth century. Before leaving for

6 Williams and Cantelon, n. 4, pp. 40-45.

7 "The rudimentary origins of the nuclear non-proliferation regime date back to 1943." At the Quebec Conference in 1943 the US and the UK agreed "not to transfer information regarding the atomic project to third parties". See Roger K. Smith, "Explaining the Non-Proliferation Regime: Anomalies for Contemporary International Relations Theory", International Organization (Stanford, California), vol. 41, no. 2, spring 1987, p. 264.

8 Williams and Cantelon, n. 4, p. 76.

London to attend the first General Assembly session of the UN, the US Secretary of State, James F. Byrnes appointed a committee to formulate the US policy on international control of atomic energy. (First session of the UN General Assembly took place in January 1946 in London.) Headed by the Under Secretary of State, Dean G. Acheson, this committee appointed a group of five advisers, chaired by David E. Lilienthal who later became the chairman of the Atomic Energy Commission, to complete the practical work.

The report of this committee, widely known as Acheson-Lilienthal Report had laid the foundation for the international regime to curb the nuclear proliferation. In fact, the idea of international inspection was the brain-child of the famous scientist J. Robert Oppenheimer. Being a member of the group of five, Oppenheimer was convinced that unless international inspection was devised, the spread of the bomb could not be prevented.

Based on the Acheson-Lilienthal Report, the Baruch Plan was announced on 14 June 1946 only to be rejected by the Soviet Union five days later.⁹ The salient features of the Baruch Plan were as follows:

9 Goldschmidt, n. 4, pp. 71-81.

- (1) It suggested the creation of an International Atomic Authority. (The Soviets feared that in the guise of an International Atomic Authority "the Americans would be in a position to conduct military intelligence on the territory of other states".)
- (2) When the system of control became fully operational there would be no stockpiles of bombs in existence. (The Soviets feared that it would have enabled "the US to continue producing and stockpiling atomic weapons indefinitely".)
- (3) The staff of the proposed International Atomic Authority "should be recruited on the basis of proven competence but also as far as possible on an international basis".
(The Soviet criticism: Since the US got the first breakthrough in this field, the Americans would have been in a position to influence the Authority. "The Authority, possessing unlimited powers and consisting primarily of Americans, could act in US interests".)
- (4) The right of veto (in the UN Security Council) should be excluded in the matters of the proposed international Authority.
(The Soviet criticism: "This would undermine the fundamental principles on which the UNO was founded

and would enable the USA to dictate terms to other states.")¹⁰

In other words, the Soviets had disapproved of the Baruch Plan lock, stock and barrel.¹¹ But they might not have anticipated that after two decades they would join hands with the Americans to impose a Treaty (NPT) similar to that of the Baruch Plan upon the rest of the world.

The Americans, however, still believe that the Baruch Plan was the first opportunity to get rid of the nuclear weapons. President Dwight Eisenhower commented on 22 September 1960 that "chance (Baruch Plan) was missed when the Soviet Union turned down the comprehensive plan submitted by the United States".¹²

On their part, the Soviets proposed that the elimination of existing weapons (in other words the US weapons) should precede the development of weapons by

10 For the text of the Baruch Plan see, Williams and Cantelon, n. 4, pp. 92-97. For corresponding Soviet criticism see, A.Y. Yefremov, Nuclear Disarmament (Moscow: Progress Publishers, 1979), pp. 14-17.

11 T.T. Poulouse, "India and the Nuclear Safeguards Controversy", India Quarterly (New Delhi), vol. 35, no. 2, April-June 1979, p. 154.

12 Quoted by Yefremov, n. 10, p. 14.

other States. Hence the Baruch Plan was "practically pre-ordained to fail".¹³

Nuclear weapons changed the world in many ways. Explicit political policies and implicit military strategies had to be changed accordingly. Huge mountains of arsenal could not guarantee victory in the war, instead they deterred nations from fighting wars. But some old thinking remains intact. Still it is a debatable question as to what is an offensive weapon and what is a defensive weapon.

"Once upon a time all the animals in the zoo decided that they would disarm, and they arranged to have a conference to arrange the matter. So the Rhinoceros said that the use of teeth was barbarous and horrible and ought to be strictly prohibited by general consent. Horns which were mainly defensive weapons, would of course, have to be allowed... [the Lion and the Tiger] defended teeth and even claws, which they described as honorable weapons of immemorial antiquity.... Then the Bear spoke. He proposed that both teeth and horns should be banned and never used again...."

- Winston Churchill, on 25 October '28¹⁴

13 Michael A. Guhin, Nuclear Paradox: Security Risks of the Peaceful Atom (Washington, D.C.: American Enterprise Institute for Public Policy Research, 1976), p. 9.

14 Quoted by Policy Review (Washington, D.C.), summer 1986, p. 49.

The spread of nuclear weapons has been described in two terms, i. e., vertical proliferation and horizontal proliferation.

The former means the piling up of nuclear weapons by the five Nuclear Weapons States (NWS) [the US, the Soviet Union, the United Kingdom, France and China⁷] and latter denotes the spread of nuclear weapons in the rest of the world, i. e. by Non-Nuclear Weapons States (NNWS). The paradox of the contemporary world is that the Nuclear Weapons States regard the horizontal proliferation endanger the world peace and the Non-Nuclear Weapons States think the other way - vertical proliferation leads to nuclear catastrophe.

According to Ian Smart, "those who should be most concerned about further horizontal nuclear proliferation are arguably NNWSs, since it is their national security... at risk.... Those who should be most concerned about so-called vertical proliferation are NWSs, because it is the capacity and utility of existing nuclear forces which are most clearly threatened by it".¹⁵

¹⁵ Ian Smart, in Karl Kaiser, ed., Reconciling Energy Needs and Non-Proliferation (Bonn: Europa Union Verlag GmbH, 1980), p. 189.

Following the Soviet refusal to their proposal, Americans started atomic testing and weapons acquisition. Before the Soviet Union conducted its first atomic test on 29 August 1949, the US had already conducted five more atomic tests including two tests of nuclear weapon effects on naval vessels.¹⁶

And the rest of the Truman Administration's tenure up to the end of 1952 was an uneventful period since it stuck to its policy expressed in the Atomic Energy Act in regard to the domestic atomic policy and the Baruch Plan regarding the foreign policy (both declared in 1946). Truman's policy clearly failed to achieve its main goal, namely, preventing the Soviet Union from making the bomb. Furthermore, it witnessed the British entry into the Nuclear Club as a third member in October 1952. As some suggest, the theory that the failure of the Baruch Plan made the US to adopt "atomic isolationism" through the Atomic Energy Act holds little water.¹⁷ Because the Acheson-Lilienthal Report that led to the Baruch Plan was submitted in 1946 and the McMahon Bill that led to the Atomic Energy Act was introduced in December 1945.

16 William and Cantelon, n. 4, pp. 179-80.

17 For example Guhin, n. 13, p. 9, says, "The reaction of the United States to the lack of success of the Baruch Plan was the inward looking Atomic Energy Act of 1946."

During these initial years the international regime that was taking shape, had its impact only on very few States such as the US, the Soviet Union, the UK, France and Canada. The Cold War tensions worsened the Super Power relations to the extent that the nuclear arms race had got the momentum of unforeseen magnitude.

In addition to the European (German) deadlock, fresh tensions surfaced elsewhere in the Korean peninsula and Africa. While the US had got one year lead in the field of thermonuclear bomb over the Soviet Union, the latter surpassed the former by one year in the development of delivery vehicles such as Inter-Continental Ballistic Missiles (ICBMs) in 1957.¹⁸

From Policy of Denial to Co-operation

Joseph Stalin, leader of the Soviet Union died in March 1953, two months after Dwight D. Eisenhower had entered the White House. The change of leadership in both the countries made it possible to review some of the old policies and formulate new ones. Soon after he took over office, Eisenhower received a report prepared by an

¹⁸ For the list of the Super Power arms race in chronology, see Daedalus (Washington, D.C.), winter 1981, p. 124.

advisory group chaired by J. Robert Oppenheimer. In fact this group was appointed by the previous Administration.

Oppenheimer described the two Super Powers like "two scorpions in a bottle, each capable of killing the other, but only at the risk of his own life", and he further advocated "a frank discussion to increase the public's knowledge of nuclear danger".¹⁹ However, this approach, which later came to be known as "Operation Candor" was severely attacked by many including Lewis Strauss, the then Chairman of the US AEC. They feared that "too much candour would aid Soviet espionage but do little for the American public".²⁰

President Eisenhower found a compromise between these two approaches in his "Atoms for Peace" proposal, unfolded before the UN General Assembly on 8 December 1953. This marked the shift from the policy of denial to the policy of co-operation. The Atoms for Peace Programme proposed a "liberal transfer of nuclear technology under the condition that receiving States undertake not to use this technology for any military purpose".²¹

19 Williams and Cantelon, n. 4, p. 73.

20 Ibid.

21 International Atomic Energy Agency Bulletin (Vienna), vol. 29, no. 3, 3/1987, p. 29.

The change of policy implied the American admission of the failure of its efforts to set up an International Authority (regime) that was to stop the spread of the bomb or what the Soviet suspected to preserve the US monopoly. The following reasons can be deduced as to why the US had to adopt a new strategy:

- (1) It was imminent to abandon the Truman Administration's approach since two other States entered the nuclear club and many States seemed to be working towards that way.
- (2) The clause of governmental control over matters relating to atomic energy in the Atomic Energy Act of 1946 virtually banned the private business in this field.
- (3) The interest shown by many countries to develop atomic energy provided the American business houses with opportunities to capture the world market.
- (4) It is misleading to assert that the US completely gave up its earlier policy. What it changed was the strategy to realize that policy. Two main features in the earlier policy were to set up an International Authority and international inspection (i. e. safeguards). These two were realized in the establishment of

International Atomic Energy Agency (IAEA) in 1957 as a direct result of Eisenhower's Atoms for peace proposal.

- (5) Many thought that by supplying atomic technology to various States the US would be in a position to influence the policies of those States.

The Atomic Energy Act of 1946 was amended in 1954 to facilitate private business. This amendment allowed "the transfer of American fissile materials to friendly States subject to the conclusion of a government agreement, known as an 'Agreement for Cooperation' between the US and the country benefitting from this assistance".²² It enabled the US to conclude with twenty-five countries agreements for cooperation in the peaceful uses of atomic energy in 1955 itself.²³ Until 1962, when the Atoms for Peace programme was officially terminated, twenty-six countries received the American aid in the field of atomic energy.²⁴ Yugoslavia and Romania also received this aid.²⁵

22 Goldschmidt, n. 4, p. 116.

23 John J. Berger, Nuclear Power: The Unviable Option (California: Ramparts Press, 1976), p. 220.

24 Benjamin N. Schiff, International Nuclear Technology Transfer: Dilemmas of Dissemination and Control (London: Croom Helm, 1984), pp. 166-7.

25 Ibid., p. 194.

This multi-dimensional venture by the US had had international repercussions on the phenomenon of nuclear proliferation. Since the "peaceful application" of the atomic technology provides a country with the essential component of the bomb - fissile material - more than one dozen countries appeared to be crossing the "threshold" by the end of the 1960s. Almost all of these countries happened to be the recipients of US assistance. It was neither unforeseen nor desired.

It is a direct consequence of a mix of both political goals and economic interests. Notwithstanding the fact that non-proliferation has been the first priority on the US agenda, its policy of influencing other countries through cooperation as well as its desire to establish American monopoly in the nuclear trade have led to the spread of nuclear technology. Among the twenty-six countries having operating reactors as of 1 August 1987, thirteen countries have received the American assistance in this field.²⁶

For example, with its agreement for cooperation with India in 1963, the US had obtained an assurance that India would buy its fuel only from the US. The "Atomic

26 IAEA Bulletin, n. 21, pp. 24-25; Schiff, n. 24, p. 194.

Industrial Complex" substantially influences the US policies on the matters of proliferation. Following the termination of the Atoms for Peace Programme the US Export-Import Bank (Eximbank) and the US Agency for International Development (USAID) have started financing nuclear exports from the US in the 1960s and 1970s. "Eighty per cent of all US reactor exports are financed by loans from the Eximbank."²⁷

Among 169 nuclear scientists trained by the US between 1958 and 1972, 55 scientists came from the five Third World countries that refused to sign the Non-Proliferation Treaty, viz. India (24 scientists), Pakistan (11), South Africa (8), Brazil (7) and Israel (5).²⁸ In addition to this list, between 1955 and 1976 a total of 10,513 scientists from countries outside the Soviet bloc participated in the US Atomic Energy Research including 1,104 from India, 120 from Pakistan, 88 from South Africa, 133 from Brazil, 250 from Israel and 192 from Argentina.²⁹ Including these six, 84 countries received this aid.³⁰

27 Schiff, n. 24, p. 167; Berger, n. 23, p. 223, and for a discussion on the "atomic industrial complex", see pp. 165, 166, 194 and 339.

28 Russell Warren Howe, Weapons (London: ABACUS, 1981), p. 291.

29 Joseph A. Yager, ed., Non-Proliferation and US Foreign Policy (Washington, D.C.: Brookings, 1980), p. 216.

30 Ibid.

Origins of NPT Regime

In the 1950s and early 1960s, international non-proliferation regime was in its embryonic state. During the initial years the dominance of the First (Capitalist) world started to be questioned by the Second (Communist) world. And the Third World was taking shape as more and more Afro-Asian countries were getting independence from the yoke of colonial rule. Very few countries were, in fact, interested in the complexities of the atomic energy. It may be noted that India and Brazil were the only two countries from the Third World which participated in the so-called Working Level Meeting of Twelve States to prepare the IAEA Statute.³¹

By the end of 1954 both the Super Powers were able to narrow down the differences of opinion on the question of setting up an International Atomic Authority. This was consistent with their tacit agreement to manage the affairs of the world on a bi-polar basis. Until today this has been the main guiding rationale behind the Super Powers' relations. However, the Cuban missile crisis of 1962 was the only exception where the big two were about to fight

³¹ Poulouse, n. 11, p. 155.

one another. Their cooperation is more evident on the Non-Proliferation issue.³² All the nuclear weapon States except China, accepted the premise that nuclear weapons were dangerous in the hands of others if they developed them. China maintained that the atomic bomb was a "paper tiger" even after it became a nuclear power.

Initial efforts by the US to curb the spread of the bomb were realized only after twenty years of labour and that too after having conceded a share in its atomic weapon monopoly to four other States. The evolution of the Non-Proliferation regime and threats to destabilize that regime as a whole, reflect the general change that has been taking place in the field of international relations. The US efforts towards this end were considered as capitalist/imperialist designs by the Communist countries.

Until China became a nuclear weapon State, the Western world as a whole was having monopoly of the bomb as the rest of the four nuclear powers, irrespective of their ideological and other differences belonged to the Western world. Finally, the Non-Proliferation Regime has been questioned on the principle of equality. The logic behind

32 For a detailed study of Super Power Cooperation see, Paul Keal, Unspoken Rules and Super Power Dominance (London: Macmillan, 1983), pp. 45-61.

the non-proliferation policies of the big powers has indeed been to curb the future proliferation while ignoring the present proliferation which poses a greater threat to world peace. However, inequality in international relations is not only manifested in the NPT Regime but also in the current international system as a whole. Same set of criticisms that questioned the rationale behind the NPT can be applied to point out that the United Nations system has also discriminated many nations in favour of a few.

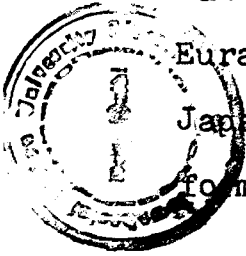
Middle countries like Australia, criticized the veto power of the Super Powers in 1945 itself.³³ But this voice of discontent was too weak to be heard amidst the applause of the victorious Allied Powers. The situation at the time when the NPT was signed in 1968 was not as it used to be in 1945. De-colonization has doubled the number of countries in the world; all new members being young and developing nations.

Though they questioned the unequal NPT regime, these Third World nations with few exceptions, became members in this regime. These few, viz., Argentina, Brazil, Israel,

33. Keesing's Contemporary Archives (Bristol, UK), vol. 5, 1943-1945, p. 7415.



South Africa,* India and Pakistan were initially joined by the developed countries such as West Germany, Italy, Japan and Australia in opposing the NPT. West European nations were collectively bargaining under the banner of Euratom for greater privileges regarding nuclear trade and Japan was equating its position with that of the former.³⁴



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The criticism by the Third World countries against the NPT that it has been created to promote the narrow interests of the developed nations does hold little water since the NPT is consistent with the UN system. Furthermore, the simple fact that the majority of the nations in the world became signatories to the NPT gives it legitimacy. But countries like the Holy See (Vatican City) which have nothing to do either with nuclear bombs or with nuclear energy are also signatories to the NPT.³⁵ Among 26 countries with operating nuclear power reactors, as of 1 August 1987, plus China and Israel, as many as nine countries are not signatories to the treaty.

* Israel and South Africa cannot be included in the category of the developing nations.

34 George Quester, The Politics of Nuclear Proliferation (Baltimore: The Johns Hopkins University Press, 1973), p. 108.

35 But the Vatican City's signing of the NPT was a symbolic gesture since the Church plays a vital role in influencing decisions in many countries including Italy. The Vatican City signed the treaty "perhaps primarily as a signal to the larger country which surrounds it". Ibid.

Notwithstanding the theoretical equality and sovereignty of all nations, the UN system has conceded special privileges to five permanent members of the Security Council. However, as mentioned above, the "middle powers" led by Australia, questioned the absoluteness of the veto power given to the five Super Powers. On 3 May 1945, Australia moved an amendment to "exclude the veto of the permanent members from all arrangements relating to the peaceful settlement of disputes, and to confine such veto to decisions involving the application of economic and military sanctions".³⁶ But this and similar attempts to reform an organisation that was yet to be born were foiled by the Super Powers.³⁷ In December 1981, similar attempt in the UN General Assembly to "study veto rule in the Security Council" was rejected.³⁸

Criticisms Vary

When the NPT was approved by the UN General Assembly on 12 June 1968, ninety-five countries voted in

36 Keesing's Contemporary Archives, n. 33, p. 7415.

37 *Ibid.*, p. 7416.

38 Edmund Jan Osmańczyk, The Encyclopedia of the United Nations and International Agreements (Philadelphia: Taylor & Francis, 1985), p. 869.

favour of it, four viz., Albania, Cuba, Tanzania and Zambia opposed and 21 countries including Argentina, Brazil, France and India abstained.³⁹ While many countries criticized the NPT, the reasons for their unacceptability vary from country to country.

Albania : It believed that the treaty was "aimed at Communist China" and the USA and the Soviet Union were "attempting to divide the world into two spheres of influence".

Brazil : It described the treaty as a "bilateral understanding between the Super Powers" to keep non-nuclear countries in a "status of permanent technological dependence". It maintained that the non-nuclear signatories were entitled to expect a "formal obligation" on the part of the nuclear powers not to use their weapons against the treaty's signatories.

France : While rejecting to sign the treaty, France maintained that it "will not sign the treaty (but) will behave in the future in this field exactly as the States adhering to the treaty".⁴⁰

39 Disarmament: Negotiations and Treaties, 1946-1971 (New York: Charles Scribner's Sons, 1972), p. 245.

40 Ibid., pp. 251-2.

A close look at the criticisms of these three countries will reveal the lack of reasoning in them. Since Communist China is regarded as a nuclear weapon State, Albania's objection that the NPT was "aimed at China" cannot be accepted. Article 9(3) of the NPT says that "a nuclear-weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967". Communist China attained this status in 1964 itself.

On 19 June 1968 the UK, the US and the Soviet Union introduced a resolution in the UN Security Council on security assurances to the non-nuclear signatories, just as Brazil demanded one and a half months back on 3 May.⁴¹

France's "assurance" that it would behave as if it signed the NPT has many times been questioned. The Non-Proliferation policies of that country are always in question.⁴²

Finally, Indian representative Mr Azim Hussain, explaining his country's objections, said on 14 May 1968

41 For the text of the resolution, see *ibid.*, pp. 253-4.

42 Amos Perlmutter, Michael Handel and Uri Bar-Joseph, Two Minutes Over Baghdad (London: Vallentine, Mitchel, 1982), pp. 40, 57 and 67-68.

that "the danger to world security arose not only from a possible spread of nuclear weapons to non-nuclear States, but also from their continued possession and future production by the existing nuclear powers". He further maintained that "non-proliferation treaty,...if it is to be effective, should prevent both nuclear and non-nuclear powers from proliferating. It should contain an acceptable balance of obligations and responsibilities."⁴³

With more than 120 adhering countries, the Nuclear Non-Proliferation Treaty has, indeed, established a regime of its own.

Characteristics of NPT Regime

1. The Constitution: It comprises the US Nuclear Non-Proliferation Act of 1978 and safeguards of the International Atomic Energy Agency (IAEA) as prescribed by the Article 3(1) and (4) of the NPT. These documents are supplemented by the guidelines of the London Club of Nuclear Suppliers of 1975 in which members belong to both the blocs, including the US and the Soviet Union.

⁴³ Disarmament: Negotiations and Treaties, 1946-1971, n. 39, p. 252.

2. Members: The NPT distinguishes countries into two categories, i. e., nuclear weapon States (NWS) and Non-Nuclear Weapon States (NNWS). By predating 1 January 1967 to attain the status of a NWS, the NPT has limited the number of NWSs to five - leaving the rest of the States as NNWS infinitely.

3. Jurisdiction: Technically the NPT applies to those who adhere to it. But in practice those States which did not sign the treaty are being affected by the NPT. This is possible since the NWS (excluding China and France), as part of their efforts to "strengthen" the NPT regime, link ~~their~~ overall relations with other countries to their policy of non-proliferation. Though this regime is a part of the nuclear world order, its jurisdiction is absolute in nature, as it is imposed upon signatories and non-signatories alike: but it has no legal sanctity.

4. Crime and Punishment: The NPT, in fact, does not contain any cause for punishing the culprits i. e., those NNWSs who try to become NWS. Furthermore it facilitates the withdrawal from the treaty with a notification three months in advance.

But other components of the constitution of the NPT regime provide room for punishment. For example, the US Non-Proliferation Act and various amendments to the

Foreign Assistance Act especially that of Symington and Glenn, prescribe the termination of the US assistance to those countries with bad proliferation credentials. The guidelines of the London Club of Nuclear Suppliers demand certain obligations from the recipient countries akin to the NPT.

5. Rulers and Ruled: The concept of rulers and ruled looks, at first sight, somewhat implausible. However, the general pattern of the nuclear world order, in which the NPT regime is a part and parcel, contains this classification as a result of unequal distribution of resources and not because of motives or policies on the part of some countries.

In a personal correspondence with this student Leonard S. Spector of the Carnegie Endowment for International Peace, Washington, D.C., has doubted "(the) premise that a regime automatically presumes rulers and ruled". He opined that "a regime can be a system in which all participants are treated equally and from which they derive mutual benefit".⁴⁴

Irrespective of this status as NWSs or NNWSs developed States as a whole enjoy a privileged position

⁴⁴From the above mentioned letter dated 21 September 1987.

which is not at all a peculiar characteristic of the NPT regime. The NNWSs such as West Germany, Italy, Canada, East Germany, Poland and Czechoslovakia feel secure under the nuclear umbrella of either NATO or WTO and enjoy predominance as nuclear suppliers.

Hence the term "Nuclear Have-Nots" in this dissertation denotes only those NNW States which have not given their assent to the NPT and do have the capabilities to cross the "threshold" such as Argentina, Brazil, Israel, South Africa, India and Pakistan. Since all these countries are in the South, the study of "nuclear haves and have-nots", within the parameters of this dissertation, acquires the 'North vs South' dimension.

However, in view of these six countries' enormous experience with nuclear technology, both civilian and military, it will be proper to call them "nuclear haves", at least, when comparing them with other Third World countries. But they are, indeed, "nuclear have-nots" when comparing with the five NW States and other developed States. This will be the focal point of this dissertation.

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CHAPTER II

CHAPTER II

THE POLITICS OF NUCLEAR HAVES

The US vs Everyone Else

Being the sponsor of every non-proliferation measure, the United States has had to confront with the "nuclear have-nots" in the Third World as well as with the "nuclear haves" such as France and West Germany in the developed world. The US has from the beginning been trying to prevent the spread of nuclear weapons, of course, with little success. It had treated friends (UK and France) and enemies (the Soviet Union and China) alike on the question of assisting them in their nuclear pursuit. However, the McMahon Act of 1954 was to specially assist the UK and liberalize its rules. Minus political motives, its non-proliferation policies have been consistent and in accordance with its declared goals. Though it never directly assisted Israel, Pakistan and South Africa in their nuclear pursuit, the US indirectly favoured them by not applying its punitive anti-proliferation measures. Following the failure of its policy of denial that aimed at preventing other countries from acquiring nuclear weapons and having witnessed the UK entering into

the nuclear club as a third member, the US through the "Atoms for Peace" proposal adopted the policy of the "nuclear fundamentalism".

The nuclear fundamentalism denotes the philosophy of recognizing the nuclear technology as a "frontier technology", hence be treated as a "common heritage of mankind" and "all the fruits and the tools of nuclear energy, save only nuclear weapons, should in principle, be at the disposal of all nations".¹ "Atoms for peace, not war" has been the objective.² But this policy, which created a wide-range of nuclear facilities in the non-Communist world has been based on the dichotomous classification of nuclear technology into that of civilian and military. In fact, this classification is still being questioned by many scholars. Furthermore, it bases on the political motives which can always be in question.

The place of the detonation of a nuclear device can as well determine whether it is a bomb or a Peaceful Nuclear Explosion (PNE). A PNE automatically becomes a bomb

1 T. T. Poulouse, Nuclear Proliferation and the Third World (New Delhi: ABC Publishing House, 1982), pp. 18 and 19.

2 Richard Kennedy in Rodney W. Jones and others, eds., The Nuclear Suppliers and Nonproliferation: International Policy Choices (Massachusetts: Lexington, 1985), p. 25.

if it is detonated on a city. David E. Lilienthal, first chairman of the US Atomic Energy Commission lamented by saying that the US proposed an alternative plan to the Baruch Plan of 1946 "with the bitterly ironic name of "Atoms for Peace". "What have been the results of this alternative plan, diametrically opposed to the objectives of America's original plan?"³

In other words, Atoms for Peace Plan helped indiscriminate dissemination of nuclear technology in the world, thus creating a country's potential even to go nuclear. But the US strategy has, as such been designed to influence the policies of the recipient countries. According to P. Lellouche, a French strategic analyst "despite their illusory character, technical fixes have been a recurrent theme in American thinking about nuclear weapons spread since 1945".⁴

In a statement by the US Atomic Industrial Forum's Committee on Nuclear Export Policy on 21 July 1976,

3 Nuclear Fuels Policy: Report of the Atlantic Council's Nuclear Fuels Policy Working Group (Washington, D.C.: The Atlantic Council of the United States, n.d.), p. 133.

4 P. Lellouche, "Giscard's Legacy: French Nuclear Policy and Non-Proliferation, 1974-1981", in Robert Boardman and James F. Keeley, eds., Nuclear Exports and World Politics. Policy and Regime (London: Macmillan, 1983), p. 22.

it was stated: "U.S. policy thus depends on three interlocking fundamentals: first, to retard nuclear weapons proliferation; second, to provide adequate assurance that nations will have access to nuclear fuel and a means of disposing of spent fuel; and third, to support a viable and competitive export programme in order to influence the nuclear policies of other nations."⁵

Until the early 1970s, the US had virtual monopoly over nuclear trade in the non-Communist world. Being the nuclear supplier, it has taken all precautions so that "sensitive" technology and material might not be transferred to the recipient countries. As a matter of principle, the US never transferred enrichment technology, nor reprocessing technology.⁶ Still the nuclear enrichment is carried out by the government itself.⁷ The end of the US monopoly on nuclear trade was followed by a brief

5 Nuclear Nonproliferation and Export Controls : Hearings Before the Sub-Committee on Arms Control, Oceans, and International Environment of the Committee on Foreign Relations, United States Senate, Ninety-Fifth Congress, first session, May 23, June 8, and June 15, 1977 (Washington, D.C.: US Government Printing Office, 1977), p. 131.

6 Only once it had provided "technical assistance" to a multinational reprocessing plant at Mol in Belgium. See Carl Walske, "Nuclear Electric Power and the Proliferation of Nuclear Weapon States", International Security (Cambridge, M.A.), vol. 1, no. 3, winter 1977, p. 100.

7 Nuclear Fuels Policy, n. 3, p. 25.

period of free market, which seemed to be threatening the very survival of the NPT regime.

Certain events during the first half of 1970s, namely the end of the US monopoly in the nuclear fuel trade by the Soviet Union, an underground Peaceful Nuclear Explosion (PNE) by India and the entry of the developed countries such as Federal Republic of Germany and France into the nuclear reactor trade that was considered to be too aggressive, had shattered many assumptions of the US on the nuclear proliferation question.

The US Assumptions

(1) Its belief that the political and strategic problems such as proliferation can be solved by "technical fixes".⁸

(2) Its prediction that it would continue to be the prime supplier of nuclear technology and fuels, notwithstanding the emergence of France and West Germany as potential suppliers. However, according to Steven J. Baker, the US never contemplated a nuclear energy monopoly and the "Atoms for Peace" programme was a response "to international competition". But "in order to exercise political control,

8 Lellouch, n. 4, p. 22.

the US had to maintain a monopoly of the commercial supplies of enriched uranium fuels".⁹

Until the 1970s, by and large the US monopoly enabled it to manage nuclear proliferation on a bilateral basis.

(3) Following the shock of Indian explosion of 1974, the US started recognizing many flaws in its proliferation policy.¹⁰ Under the "Atoms for Peace" programme it thought "Agreement for Cooperation" would be enough to ensure the proper, civilian use of its technology and material supplied to many a countries.

By the mid-1960s, the policy had been shifted towards "full scope safeguards" that were realized in the NPT in 1968. Full scope safeguards means the Non-Nuclear Weapon States should allow all their nuclear facilities - both that of indigenous and imported from abroad - to be inspected by the IAEA.

9 Steven J. Baker, "Monopoly or Cartel?", Foreign Policy (New York), no. 23, summer 1976, pp. 207 and 208.

10 Arnold Kramish, "Four Decades of Living with the Genie: United States Nuclear Export Policy", in Boardman and Keeley, n. 4, p. 31.

The End of the US Monopoly

Until 1972, the US dominated the world reactor market with over ninety per cent of the sales.¹¹ The Soviet Union had formally ended the American monopoly in supplying fissionable materials since 1971.¹² By 1976 "eleven other reactor companies in seven other countries competing with two United States companies" emerged.¹³ Those two US companies are General Electric and Westinghouse Electric Co.

This dramatic reversal had caused alarm both in the US business circles and political circles. It was not because the US companies were unable to compete with their business rivals but the non-proliferation requirements of the US had been unacceptable to the countries such as Brazil and Iran. The Washington Post editorially commented that "the Brazilians, for example, might have purchased their reactors from the United States if we were also in

11 Ibid.

12 New York Times, 16 March 1971, p. 3: 1.

13 Boardman and Keeley, n. 4, p. 31.

Table I

Nuclear Plant Exports (WOCA)

In percentage

Supplier Country	1965-69	1970-74	1975-79	1980-84
US	84.0	84.0	55.0	34.0
FRG	7.5	5.0	20.0	29.0
France	5.5	3.0	18.0	28.0
Sweden	-	4.0	-	-
Canada	3.0	4.0	7.0	9.0
Total Gwe capacity of all reactors exported	10.4	32.1	15.0	9.3

WOCA = World Outside Communist Areas.

Source: Bertrand Barre, in Rodney R. Jones, et al., ed., The Nuclear Suppliers and Nonproliferation: International Policy Choices (Massachusetts: Lexington, 1989), p. 67.

the business - which we are not - and if we did not have a self-imposed ban on the export of technology and information required for uranium enrichment".¹⁴

In addition to the Brazilian episode the sale of the Soviet "nuclear research capacity suitable for the development of irrigation system" to Libya,¹⁵ and a lucrative Franco-Iranian nuclear deal, would have given billions of dollars in profits to the former and enabled the latter to participate in the multinational enrichment consortium - Eurodif.¹⁶ Brazil, Libya and Iran, had, in fact, turned to the US in this regard and received negative signals - refusal to sell enrichment and reprocessing system, and imposition of unacceptable and 'incompatible' safeguards! In the words of the late Shah of Iran who told Business Week (17 November 1975) in an interview: "In atomic energy you are asking us for safeguards that are incompatible with our sovereignty, this that the French or the Germans would never dream of asking."¹⁷

14 Editorials on File (New York), vol. 6, no. 12, 16-30 June 1975, p. 717.

15 Ibid., p. 714.

16 Energy Crisis, 1974-75, vol. 2 (New York, N.Y.: Facts on File Inc., 1975), p. 189.

17 Quoted by Norman Gall, "Atoms for Brazil, Dangers for All", Foreign Policy, no. 23, summer 1976, p. 176.

Earlier a US-Iran deal to build eight nuclear plants in Iran had been stalled in a dispute over Iran's insistence on the right to reprocess its own spent fuel.¹⁸ Among these three, Iran and Libya have signed and ratified the NPT, the former when the treaty came into force and the latter in May 1975. Being the strategic ally (under the Shah) of the US as well as a country that signed and ratified the NPT, Iran had until then been requesting for liberal acceptance of its demands by the US on the nuclear trade. For example, the Shah had asked for Most-Favored-Nation (MFN) treatment for Iran in the proposed agreement for cooperation on nuclear matters.¹⁹ Another Iranian deal with West Germany that would have enabled the Kraftwerk Union (KMU) to install six reactors in that country was stalled after the Shah was dethroned in 1979.²⁰

By the time the Brazilian-German deal materialized, the US share in nuclear trade had shrunk by half. It was an outcome of many flawed policies, on the part of the US, its European allies and events of global importance such as

18 Ibid.

19 Charles N. Van Doren, "Some Perspectives on Supplier Controls", in Jones, n. 2, p. 19.

20 Erwin Hackel, "The Politics of Nuclear Exports in West Germany", in Boardman and Keeley, n. 4, p. 67.

the oil crisis of 1973-74. Throughout these years and, in fact, ever since the Non-Proliferation Treaty was signed in 1968, the bone of contention had indeed been the interpretation or misinterpretation of Article IV consistent with Articles I and II.

According to the Nuclear Non-Proliferation Treaty, the Nuclear Weapon States (NWS) agreed not to assist other countries i. e., Non-Nuclear Weapon States (NNWS) in their attempts to acquire nuclear weapons (Article I). Similarly, NNWS agreed not to receive the transfer "whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly"; (Article II). Article IV ensures "the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy". The main criticism of NNWS has been the non-implementation of Article IV in addition to Article VI under which parties agreed to pursue negotiations in good faith to curb nuclear arms race, bring about nuclear disarmament and take measures towards a Treaty on General and Complete Disarmament. During the last three Review Conferences on the NPT, the Non-Nuclear Weapon States attacked the Super Powers on the non-fulfilment of the

promise under Article VI.²¹

Furthermore, the controversy of interpretation of various provisions of the NPT made a dent into differences between the US on the one hand, and France and West Germany on the other. The former tried to cite Articles I and II to prevent the latter's sale of nuclear technology and material to countries such as Pakistan and Brazil, and the latter tried to justify their action by invoking Article IV. The entire controversy bases on the hitherto basic dilemma as to what is a peaceful atom and what is a military atom. Due to the initial reluctance of France and West Germany, members of the London Suppliers Group (LSG) exporting civilian nuclear technology took unusually long time to adopt a ban on sales of nuclear materials and equipment referred to in the trigger list.²²

It became an imperative for West Europeans in general and France and West Germany in particular to enter international nuclear market. They were guided by four considerations: (1) Technological and commercial opportunity, (2) Reliability (independence) of nuclear fuel

21 T. T. Poulouse, "Nuclear Proliferation and Second NPT Review Conference", in K. Subrahmanyam, ed., Nuclear Myths and Realities: India's Dilemma (New Delhi: ABC, 1981); SIPRI Yearbook 1979 (London: Taylor & Francis, 1979), vol. 10, p. 327.

22 SIPRI Yearbook, 1978 (London: Taylor & Francis, 1978), p. 28.

supply, (3) Resource Pooling and risk sharing, and (4) International Organization interests.²³ During the late 1950s and throughout the 1960s, European nuclear industry started functioning as a licence user of US technology owned by Westinghouse Co. and General Electric Co. Sometimes these two American giants used to partly own companies in West Europe.²⁴ In return, the US has had a say in the export transactions of these companies, e.g., any export of US licenced items to Communist countries had to be approved by it in advance.²⁵

The story of Framatome of France exemplifies the European attempts to gain independence in nuclear exports from the US. With virtual monopoly over domestic market, Framatome produced pressurized water reactors (PWR) under license from Westinghouse (US). In 1975-76 the French Government had bought out most of the shares owned by

23 Horst Mendershausen, "The Multinationalization of Reprocessing and Enrichment: How and Where?" in Karl Kaiser, ed., Reconciling Energy Needs and Non-Proliferation (Bonn: Europa Union Verlag GMBH, 1980), pp. 139-40.

24 Paul L. Joskow, "The International Nuclear Industry Today", Foreign Affairs (New York), vol. 54, no. 4, July 1976, pp. 792 and 795.

25 Ibid., pp. 794-5.

Westinghouse in Framatone.²⁶ The Westinghouse Framatome agreement expired in 1982.

Both Kettle and Pot are Black

The fact that the US and West Europeans have since 1945 been political friends as well as strategic allies has been put to test on the question of nuclear trade. Lack of confidence in each other and suspicion over other party's motives have been the recurrent theme of discussion across the Atlantic. Though the Soviet Union and East European countries are members of the London Club, they have never been involved in any controversy. Only once the Soviet behaviour was criticized as "irresponsible" in 1975 when it agreed to provide Libya with a nuclear research facility.²⁷

Following its experience with China, the Soviet Union made it a point not to assist any country to go nuclear.²⁸ In fact the rift between these two Communist giants developed over Moscow's refusal to assist Beijing

26 Ibid., pp. 792-3.

27 Editorial comment in The Sun (Baltimore, Md), 16 June 1975 and reported in Editorials on File, n. 14, p. 715.

28 Gloria Duffy, "Soviet Nuclear Exports", International Security, vol. 3, no. 1, summer 1978, p. 85.

in its nuclear bomb programme.²⁹ The Non-Proliferation policy of the Soviet Union must have been influenced by the fact that once any country acquires nuclear weapons - however modest they might be - it feels certain degree of security and independence. However, this is the main rationale behind the non-proliferation policies of the Big Powers. To be euphemistic, this rationale needs to be applied to justify the imperatives of regime maintenance so that any threat to the stability of the world order as a whole could be avoided. Soviets demanded safeguards when their close friend, India, approached with a demand for the supply of 240 tons of heavy-water in late 1976 following the termination of US supply. Having supplied 60 tons of heavy water immediately without mentioning safeguards, the Soviets in mid 1977, to the utter surprise and frustration of India, refused to supply the remaining consignments without safeguards. At last India had to fulfil this requirement in order to operate its Rajasthan Atomic Power Plant (RAPP).³⁰

29 K.N. Ramachandran, "China and Nuclear Non-Proliferation Issue", IDSA Journal (New Delhi), vol. 13, no. 1, July-September 1980, p. 95.

30 Duffy, n. 28, p. 97.

Thus, when we discuss about the politics of nuclear haves, particularly under the NPT, it excludes the Soviet Union, since even the US had to concede the non-proliferation credentials of that country. A US Congressional Research Service study appreciated the Soviet safeguard record as "exemplary".³¹

Politics Across the Atlantic

On the other hand, West European companies started forming consortia among themselves, e. g. in the first place national unifications such as that of KWU of West Germany and Framatome of France. In the field of enrichment and reprocessing Trans-European Companies have been formed.

(1) Urenco: It was created by a trilateral Almelo agreement among West Germany, the Netherlands and the United Kingdom. It uses gas centrifuge technology to enrich uranium. Its market share in 1985 was 5 per cent.

31 Brahma Challaney, "Tackling Nuclear Proliferation", Indian Express (New Delhi), 23 December 1987. However, the Soviet Union refused to allow nuclear cooperation between its East European allies and the West. It was reported that the Soviet Union had taken away ninety per cent of Czechoslovakia's uranium. See New York Times, 5 March 1972, p. 20: 4.

(2) Eurodif: It was created by French initiative and leadership. Spain, Belgium and Iran are members. It applies gaseous diffusion methods to enrich uranium. Its market share in 1985 was 22 per cent. (The US and the Soviet Union accounted for 47 per cent and 9 per cent respectively. The remaining 17 per cent was provided from utilities' surplus stocks.³²

There are two principal companies, Eurochemic and Unirep for reprocessing services.³³ Since all European companies heavily relied on the US technology, except in reprocessing and fast breeder technology, in which the US lags behind Europe,³⁴ there was not much scope for trans-European co-operation in the reactor technology. Following the January 1981 agreement between Framatome and Westinghouse, the former has gained freedom from license relationship with the latter. Though it continues to have shares in

32 For details see, Karl Kaiser, n. 23, p. 140; Internationalization to Prevent the Spread of Nuclear Weapons, A SIPRI BOOK (London: Taylor & Francis, 1980), pp. 113-14; and 209; and for the details of market shares, see William Walker, "Nuclear Trade Relations in the Decade to 1995", in John Simpson, ed., Nuclear Non-Proliferation: An Agenda for the 1990s (New York: Cambridge University Press, 1987), fn 5 in p. 180.

33 Kaiser, n. 23, p. 140.

34 Joskow, n. 24, p. 788.

Framatome, Westinghouse, cannot thwart any reactor deal by Framatome, which is a sole prerogative of the government of France.³⁵ So far, no European cartel in reactor industry has been formed. But this trend seems to be changing. Recently a proposal has been given for the "long term prospects of a KWU-Framatome merger to form a single European vendor to compete with a US-Japan axis".³⁶

Deal of the Century

On 2 May 1975 West Germany strengthened the NPT by ratifying it along with Belgium, Italy, the Netherlands, and Luxembourg, though after five years since the treaty came into force. This was just three days before the first NPT review conference held in Geneva. Simultaneously, the Germans were doing diametrically opposite things elsewhere in South America - negotiating with Brazil to supply an entire nuclear fuel cycle to that country. A New York Times editorial criticized the German action as "reckless... could set off a nuclear arms race in Latin America...and endanger the security of the US, and the world as a whole".³⁷

35 Lellouche, n. 4, p. 36.

36 Emphasis added, see, Nuclear Engineering International (Sutton, Surrey, UK), vol. 33, no. 402, January 1988, p. 11.

37 New York Times, 13 June 1975, p. 36.

One US Senator had found it necessary to invoke Monroe doctrine. John O. Pastore, Chairman of the Joint Congressional Committee on Atomic Energy, declared on the floor of the Senate, on 3 June 1975: "If this agreement (German-Brazil deal) goes through at this time in this fashion, it will make a mockery of the Monroe Doctrine."³⁸

According to the deal which the Germans were trying to capture since 1968, the West German Consortium, Kraftwerk Union (KWU) would build eight reactors in Brazil along with an enrichment plant and a reprocessing plant. Ironically, the basic design of the reactors proposed to be supplied to Brazil was developed by Siemens - senior partner in KWU - under license from the US giant Westinghouse. After the formation of KWU, Westinghouse suspended its license arrangements in 1970.³⁹

On the other hand, the recipient country - Brazil - had been under military rule for quite a long time. It refused to sign the NPT but signed and ratified the Treaty of Tlatelolco that established a nuclear weapon free-zone in Latin America, with maximum reservations which can nullify

38 Quoted by Gall, n. 17, p. 189.

39 Ibid., p. 157.

the Treaty itself. While signing and ratifying the Treaty, it had reserved the right to carry out "nuclear explosions for peaceful purposes, including explosions which involve devices similar to those used in nuclear weapons....Brazil also stated that it did not waive the requirements for the entry into force of the Treaty laid down in Article 28. The Treaty is therefore not yet in force in Brazil."⁴⁰

The US had the dilemma of preventing a friend in Europe from supplying nuclear technology to another friend in South America. Through this agreement West Germany had cut into hitherto monopoly of the US. The deal sparked off a political dispute and a commercial competition between the US and West Germany. Since the nuclear trade is carried out under strict governmental control, an open confrontation between the two governments seemed imminent. From early 1960s, Brazil had been a topper alongwith India in the list of "threshold countries" which were perceived to be going nuclear. India and Brazil were the only two States from the Third World that participated in the Working Level Meeting of Twelve States which had prepared the IAEA Statute.⁴¹

40 Jozef Goldblat, Arms Control Agreements : A Hand Book (New York: Praeger, 1983), p. 282.

41 T.T. Poullose, "India and the Nuclear Safeguards Controversy", India Quarterly (New Delhi), vol. 35, no. 2, April-June 1979, p. 155.

Politically, the US had more things to worry about. The fate of Brazil's stability was always in question. Brazil's nuclear activity in this magnitude would certainly cause alarm in the neighbouring Argentina - a "traditional rival" of the former. What the US feared most was, probably, the spread of enrichment and reprocessing technologies which can make one self-reliant in nuclear fuel cycle facilities. Hence the danger of proliferation. If it cannot stop more amenable Germans in this business, how can it stop less amenable French. The victim of the whole affair was to be the NPT regime. Following the blow given by the Indian test in the previous year, many in the West, especially in the US, were worrying about a possible bang from a second Indian test. Not that they welcomed it, but they were convinced that India would conduct a second test. "It could be days, it could be weeks", one US official told Science Magazine. 'It's just a matter of when they decide to push the button'.⁴²

The perceived danger did not come from a distant India, but from the backyard of the US created by its friend - West Germany. Nationalist passions were running

42 Science (Washington, D.C.), vol. 188, no. 4191, 30 May 1975, p. 911; Newsweek (New York), 16 June 1975, p. 27.

high in both the countries. The media spear-headed the attack on behalf of the country and business community. West German press commented: "No matter where a plant is being planned, American diplomats agitate as if they were employees of the American firms."⁴³ The role of the US Export-Import Bank (Eximbank) was severely criticized by German press. "...Even when we try to lower the burden of interest through all sorts of tricks, the Eximbank comes in with 2 per cent less" was the criticism by Die Zeit and Wirtschaftswoche.⁴⁴

The press criticism in the US was mixed with self-criticism. Apart from New York Times which commented on the German behaviour as "reckless", The Sun (Baltimore, Md) was more emphatic: "If the US had a clean record...it could bring moral pressure against Germany's sale to Brazil, or France's proposed deals with Pakistan and South Korea, or the Soviet Union's irresponsible trafficking with Libya. But the record is sullied...."⁴⁵ "...of all the countries in the world that should not have done it is West Germany", was the comment from the Congress.⁴⁶

43 Gall, n. 17, p. 167.

44 Ibid.

45 Editorials on File, n. 14, p. 715.

46 Gall n. 17, p. 189.

Commercial Interests

For West Germany, the Brazilian deal became indispensable. The \$ 4 billion deal was to have generated contracts for nearly 300 German firms and assured the stability of 13,000 jobs in KWU's own offices and factories.⁴⁷ For the US firms, it was a deal taken away from their pockets. "We thought...that we pretty well had that business locked up" so the spokesman of Westinghouse told a Congressional Committee on 22 July 1975.⁴⁸ The US refused to sell enrichment and reprocessing plants alongwith power reactors to Brazil when that country first approached in this regard. The US nuclear industry felt aggrieved of being subjected to lose profits for political idealism.

In additon to its refusal to sell enrichment/reprocessing technology, the US Energy Research and Development Administration (ERDA) announced in 1974 that it would not accept new orders for enriched uranium, due to its inability to meet the existing commitments as well as future demands. Coupled with its need for secure supply of uranium and market for its reactor technology, West

47 Ibid., p. 158.

48 Ibid., p. 164.

Germany utilized the US unilateral moratorium to conclude this controversial deal.

Brazil, with its abundant hydro-electric potential and natural resources embarked on an industrial development programme aimed not only at achieving self-reliance but also at entering nuclear market as a fuel supplier. It was widely believed that Brazil had large quantities of uranium reserves. The 1975 deal had a clause under which West Germany agreed to assist Brazil's search of uranium reserves and in return Brazil agreed for the West German access to these reserves. Antonio Azeredo de Silveira, the then Foreign Minister of Brazil expressed his hope in London in October 1975 that the Brazil German deal would lead to an "horizontal inter-dependence".⁴⁹ In fact Brazil demanded for gas centrifuge technology to be transferred to that country by West Germany. The Germans were required to procure the consent of other two partners under the tripartite Urenco set-up to transfer centrifuge technology. Objection from the Netherlands thwarted this plan.⁵⁰ Finally, West Germany agreed to provide Brazil with unproven Jet Nozzle technology for enrichment.⁵¹

49 Ibid., p. 162. The preceding discussion was largely derived from this article.

50 Ibid., p. 171.

51 "Jet Nozzle" has other names such as "Aero-dynamic Method", and "Backer Method" named after its inventor, Erwin-Willy Backer; see Science, vol. 188, no. 4193, 13 June 1975, p. 1092.

Jet Nozzle method consumes more electricity than the other two proven methods - gaseous diffusion and gas centrifuge. This was justified as Brazil has abundant hydro-electric potential, but far away from the industrial centres and transmission of electricity to these industrial areas was uneconomical. With the enrichment plant built at hydro-electric areas, the energy in the form of enriched uranium would be profitable to send to the power plants adjacent to these areas.

Both the US and West Germany viewed this controversy as a result of other party's short-sighted commercial interests. Furthermore, Brazil's insistence on its right to conduct Peaceful Nuclear Explosions complicated to the extent of damaging the US-German relations. Not only when signing and ratifying the Tlatelolco Treaty, but also before signing the deal with Germany, Brazil confirmed reports (2 June 1975) and it intended to detonate "PNEs".⁵²

As a last resort to scuttle the deal, a San Francisco engineering firm, Bechtel offered Brazil to build one enrichment plant. In a letter to Brazil, Bechtel informed that the US ERDA had taken a decision to encourage

52 Editorials on File, n. 14, p. 714.

Uranium Enrichment Associates (UEA) to construct enrichment plants outside the US at "one of the locations which is most promising in Brazil, with the abundant hydro-potential in the Amazon basin".⁵³ In fact, there was no such "decision" by the ERDA. Shuttle services by the State Department officials to both Bonn and Brasilia could not achieve the desired result.

In addition to the German persistence, the then Ford Administration did not wish to force the Germans on a vital issue to their economy. According to one high level official, the Ford Administration "would not sacrifice alliance relationships on the alter of nuclear non-proliferation".⁵⁴ Even the new Carter Administration tried at high level to stop the implementation of the deal.

With Carter's arrival, began the plutonium debate, the Nuclear Non-Proliferation Act of 1978 and the inauguration of International Nuclear Fuel Cycle Evaluation (INFCE). In fact, these three events were a direct consequence of

53 Gall, n. 17, p. 192.

54 Michael Nacht, "Controlling Nuclear Proliferation" in Kenneth A. Oye and Others, eds., Eagle Entangled: U.S. Foreign Policy in a Complex World (New York: Longman, 1979), pp. 155 and 157.

Brazil-German deal. Furthermore, Germany's insistence on safeguards, on Brazilian deal became the basis for London Club guidelines.

Paradox of the US Policy

The US pressure on supplier countries like West Germany and France, and recipient countries like Brazil, Iran, Pakistan, South Korea and Taiwan resulted in the erosion of confidence in its role as a leader and strategic ally. Incidentally, all the above mentioned countries have, indeed, been close friends of the US. And its nuclear trafficking with South Africa and willingness to provide Egypt and Israel with nuclear equipment without full scope safeguards, have been viewed as that country's double standards. Even President Carter's opposition to "breeder reactors" on the ground that it would lead to a premature entry into 'plutonium economy' was criticized by some Europeans as "an attempt to quash a technology in which Europe leads and America trails".⁵⁵

The US opposition to the French sale of reprocessing plants to South Korea and Pakistan strained Franco-US relations. Similarly, its attempts to scuttle the Brazilian-

55 "U.S. Foreign Policy: Future Directions", Editorial Research Reports (Washington, D.C.: Congressional Quarterly Inc., 1979).

German deal had, so reported the New York Times (28 March 1977), brought the US-Brazil relations to their "lowest point in more than a decade".⁵⁶

West Germany had to cancel the sale of a nuclear power station even to the Soviet Union following the US pressure. Helmut Schmidt had agreed to sell a power plant to the Soviet Union in 1974.⁵⁷ Taiwan and South Korea were compelled by the US not to acquire reprocessing plants, the latter from France. France had to unilaterally cancel the sale of a reprocessing plant to Pakistan, again due to pressure upon both the countries from the US.

It has been suggested that the then Secretary of State, Henry Kissinger, pressed Zulfikar Ali Bhutto and Jacques Chirac to cancel the deal. It might be the reason why both Bhutto and Chirac lost their positions.⁵⁸ Inconsistency in its policies made the US to be suspected by friends and enemies alike. For example, it compelled

56 Grace M. Ferrara, ed., Atomic Energy and the Safety Controversy (New York, N.Y.: Facts on File Inc., 1978), p. 124.

57 Energy Crisis, vol. 2, 1974-75, n. 16, pp. 190-2.

58 Amos Perlmutter, Michael Handel and Uri Bar-Joseph, Two Minutes Over Baghdad (London: Vallentine, Mitchell, 1982), p. 40.

Japan in 1974 to ratify the NPT and suggested an interruption of enriched uranium fuel supplies if it did not do so. But it offered nuclear reactors and fuel supplies to Egypt and Israel without demanding the ratification of the NPT by both the recipient countries. Egypt signed but did not ratify the NPT until 1981, and Israel refused even to sign it.

All Sticks And No Carrots

The "Nuclear Haves" Proliferation concerns and rationality have obviously been punctuated by unusual exceptions as in the case of racist Pretoria. France provided Pretoria with a nuclear reactor; West Germany helped it to develop a "unique" and "competitive" new process for uranium enrichment.⁵⁹ This unique method is nothing but West Germany's Backer Jet Nozzle process. South Africa acquired this technology from West Germany.⁶⁰ Finally, the US supplied highly enriched (enough to be used in weapons) uranium to South Africa. Congressman Les Aspin had criticized the Ford Administration for selling weapons grade uranium to South Africa: "South Africa has the fear

59 Science, n. 51, p. 1090.

60 Gall, n. 17, p. 168.

to want to build a bomb and it has the technical skill", he charged in a statement, "all it needs is weapons-grade uranium and the US government is now supplying that".⁶¹

On the other hand, Henry Kissinger was going to Islamabad, Seoul, Paris and Brasilia, and pressing those governments to change their nuclear behaviour. His pressure on France and warning to Pakistan to cancel reprocessing plant deal, further deteriorated Franco-US relations. Kissinger announced on 9 August 1976 that "the U.S. would bar the sale of about 100 A-7 Corsair jet-fighter bombers to Pakistan unless it agreed to a compromise on the A-Plant dispute".⁶² The French Foreign Ministry had found it necessary to call US Charge d' Affaires and expressed "displeasure" over the US attempts to thwart the deal. According to France, this deal had been approved by an accord signed on 18 March 1976 by France, Pakistan and the IAEA.⁶³

Unilateral cancellation of this deal by France has put that country in trouble. Pakistan has filed a

61 Science, n. 51, p. 1090.

62 Ferrara, n. 56, p. 120.

63 Ibid., pp. 120-21.

case with International Court of Justice against France for that country's breach of contract. In order to escape adverse verdict, France is now offering to build a reprocessing plant in Pakistan.⁶⁴

Similarly, South Korea was made to believe that the cancellation of its deal with France to acquire reprocessing plant "was in its own best interest", so was told a Senate Committee.⁶⁵

The US Non-Proliferation Act of 1978 (NNPA)

Unorganized politics of free market forced the events towards a reversal to previous technological denial in the US and the formation of a cartel among the nuclear suppliers as a whole. These two events took shape upon the US initiative.

With the Carter signing the Nuclear Non-Proliferation Act (NNPA) on 10 March 1978, the US came out with a new non-proliferation policy.

(A) It aimed at codifying what was already required:

- 1) Prohibition of uses of exports for explosive devices;

64 How was Pakistan able to 'get rid' of reprocessing plant deal with France is an interesting story. It will be discussed in the succeeding chapter, *infra* 102-3.

65 Ferrara, n. 56, p. 121.

- 2) Application of safeguards to all exports;
- 3) Provision of adequate physical security; and
- 4) Application of criteria to subsequent generations of material or equipment generated from exported sensitive nuclear technology.

(B) It was aimed at prohibiting retransfer of the US exports and technical transfer without its approval. And to discourage plutonium reprocessing and uranium enrichment:

- 1) Application of full-scope safeguards to all peaceful nuclear activities in non-nuclear weapon State recipients;
- 2) Prohibition of reprocessing without US approval; and
- 3) Prohibition of third party transfer without US approval.

(C) Requirement to renegotiate the existing Agreements for Co-operation:

- 1) Requirement to the return of all exports in case of breach of non-proliferation commitment or safeguards agreement;
- 2) Prohibition of storage of separated plutonium derived from the US supplied material without its approval; and

- 3) Prohibition of further enrichment of US supplied uranium without its prior approval.⁶⁶

This Act created specific problems for specific countries. For example, requirements under (B) 2) and 3) became troublesome for Europe and Japan. Requirement 1 under (B) was aimed at hitting those NNWS who refused to sign the NPT, such as India, Israel, Egypt (It ratified the treaty in 1981), Argentina and South Africa.⁶⁷ Furthermore, all the existing Agreements for Cooperation were to be renegotiated so that the new Act's requirements could be met. In other words, this Act was aimed at imposing the NPT through the backdoor.

Breach of Confidence

The legislative history of the NNPA indicates the politics that the US played during these years. Before Carter entered the White House, the Congress was moving towards a comprehensive legislation in order to curb retransfer of US supplied material and ban on US export of nuclear material/technology to those who reject full scope

66 Frederick Williams, "US Congress and Non-Proliferation", International Security, vol. 3, no. 2, fall 1978, pp. 46-47.

67 Ibid.

safeguards. This measure was called Export Reorganization Act of 1976. By mid-1977 the measure was renamed as the Anti-Proliferation Act. Finally, it became the Nuclear Non-Proliferation Act of 1978.⁶⁸

Under the new Act parties should accept to renegotiate their Agreements for Cooperation with the US within thirty days after the Act came into force on 10 March 1978. A grace period of further twenty-three months would be given to those parties which agreed to renegotiate existing agreements. The law also authorizes the President to extend this period by a notification to the Congress in one year increments, if he determines that failure to continue cooperation would be seriously prejudicial to the achievement of US non-proliferation objectives or otherwise jeopardize the common defence or security.⁶⁹

India was the first country to get this waiver. President Carter had waived these provisions so that the export of low-enriched uranium to India would be possible.⁷⁰ But Pakistan has managed to get this waiver extended up to

68 Walter C. Patterson, The Plutonium Business: And the Spread of the Bomb (London: Wildwood House, 1984), pp. 119, 120.

69 Thomas R. Pickering in Kaiser, n. 23, pp. 127, 128.

70 Ibid., pp. 128-30.

mid 1990. In December 1987, the US Senate approved a new six-year waiver for Pakistan of the NNPA. According to The Christian Science Monitor, "A key factor in the Senate's decision was Afghanistan".⁷¹ In return to Pakistan's support for the Afghan resistance, the Senate has waived not only the NNPA but also many an amendment to the US Foreign Assistance Act. These include:

- (1) 1976 Symington Amendment regarding unsafeguarded enrichment activity;
- (2) 1977 Glenn Amendment and 1981 modification on re-processing activity;
- (3) 1985 Solarz Amendment which was added to the 1977 part of the Glenn Amendment. Solarz Amendment prohibits the US aid to any NNWS that seems to be involved in a nuclear explosive device programme; and
- (4) 1985 Cranston Amendment requires that for each fiscal year, before any aid can be given to Islamabad, the President must certify that Pakistan does not "possess a nuclear explosive device" and that the US aid will significantly reduce the risk of its doing so.⁷²

71 Christian Science Monitor, World Edition (Boston, M.A.), 21-27 December 1987, p. 12.

72 Arms Control Today (Washington, D.C.), vol. 17, no. 9, November 1987, pp. 10 and 11.

Critique of the NNPA

The enactment of the law is itself a breach of confidence on the part of the US. Before the starting of the INFCE that was to give a judgement on the plutonium controversy, it was agreed not to take any step that "would jeopardize either programmes already under way or existing agreements on peaceful use of nuclear energy", until the study of INFCE was over.⁷³ The INFCE came to an end in February 1980. By enacting the NNPA in 1978, the US has, indeed, violated what the duration of INFCE (1977-80) was called - the nuclear "truce".⁷⁴ The truce was between the warring parties - the US and Europe - on the question of plutonium viability.

Secondly, the provisions of the Act are contrary to the established norms of international law. All the countries and organizations such as EURATOM have been required to renegotiate (an euphemism for the requirement to accept the new conditions in the NNPA), their Agreements for

73 Gunter Hildenbrand, "A German Reaction to U.S. Non-Proliferation Policy", International Security, vol. 3, no. 2, fall 1978, p. 53.

74 M. Zuberi, "Nuclear Safeguards: The Servitudes of Civilian Nuclear Technology", in K. Subramanyam, n. 21, p. 17.

Cooperation with the US. These Agreements have been concluded since 1954. For example, India's agreement with that country was concluded in 1963 and would have been in force until 1993. But, since India has refused to renegotiate the 1963 Agreement, obviously on the terms of the US, the US has terminated enriched uranium fuel supply to the Tarapur Atomic Power Plant. In the early 1980s, a tripartite agreement was signed by India, France and the US. As per the terms of the Agreement, France agreed to supply fuel to the Tarapur plant.

According to Article 60 of the Vienna Convention on the Law of Treaties, a bilateral treaty can be terminated or suspended only when a "material breach in its terms has been committed by one party".⁷⁵ Furthermore, Article 27 of the same Convention "prohibits a party...from invoking the provisions of its internal laws as an excuse for failure to perform treaty obligations".⁷⁶ A strange argument was

75 P.R. Chari, "An Indian Reaction to U.S. Non-proliferation Policy", International Security, vol. 3, no. 2, fall 1978, p. 59.

76 Ibid., For full details see I.M. Sinclair, The Vienna Convention on the Law of Treaties (Manchester: The University Press, 1975), pp. 54, 103-5. Also see, N. Ram, "India's Nuclear Policy: A Case Study in the Flaws and Futility of Non-Proliferation", IDSA Journal, vol. 14, no. 4, April-June 1982, p. 468.

put forward to escape these obligations. According to this argument, the 1963 Indo-US bilateral Agreement for Cooperation was a mere "executive" agreement and would not come under international law.⁷⁷

Finally, Japan and other West European countries were the worst affected parties, because most of the provisions in the NNPA would hinder their breeder and reprocessing plants.⁷⁸ Since Euratom was not initially prepared to renegotiate its agreement with the US, cooperation was suspended in 1978 itself. It was restored only after Euratom agreed to comply with the provisions of the NNPA.⁷⁹

Plutonium Controversy and INFCE

The bone of contention that led to all these events - the NNPA, London Club and strained relations across Atlantic - was the controversy on the rationale behind "plutonium economy". The US tried to prevent

77 Ibid., p. 528.

78 Ted Greenwood and Robert Haffa, Jr., "Supply-Side Non-Proliferation", Foreign Policy, no. 42, spring 1981, p. 130.

79 Pickering in Kaiser, n. 23, p. 128.

Europeans from developing breeder reactors and exporting enrichment plants on the premise that these developments would encourage nations to develop nuclear weapons. However, the US decision not to accept new orders for enriched uranium after June 1974, in order to ensure stable demand for the private business in that country has highlighted two basic points: (1) scarce supply of uranium, and (2) unreliability of the US supplies.⁸⁰

By pointing out these causes, the Europeans went on with their plans for breeder and reprocessing plant exports. Following the strong criticism against the NPA, the Carter Administration proposed an international study, that came to be known as International Nuclear Fuel Cycle Evaluation (INFCE) to "minimize the danger of proliferation ...without jeopardizing energy supplies".⁸¹

With the original participation of forty countries and four international organizations in 1977, the INFCE study started. By the time it ended, altogether sixty-six countries and five international organizations including

80 For a critical evaluation of the "maladroit mechanisms", of the US that broke its own monopoly, see Patterson, n. 68, pp. 89-90.

81 R. Skjoldebrand, "The International Nuclear Fuel Cycle Evaluation - INFCE", IAEA Bulletin, vol. 22, no. 2, April 1980, p. 30.

IAEA which actively participated, were involved in this study. Eight working groups produced 25,000 pages of their observations. India was in Group-I that studied the "Fuel and Heavy Water Availability".⁸² The INFCE did not recommend anything either on the feasibility of the spread of plutonium, or on the specific measures to be taken to curb proliferation.

Furthermore, it concluded that "fuel cycles cannot be ranked in terms of their relative proliferation risk based on whether or not they employ reprocessing". Indirectly, it rejected the US stand on the plutonium question.⁸³ However, its contention that "breeder reactors are not appropriate for countries with small nuclear programme" was a consolation to the US.⁸⁴ The plutonium controversy subsided by the early 1980s, not because of INFCE but because of the inauguration of new Reagan Administration, and a slump in the international nuclear business. It must be noted that the boom in the early 1970s in nuclear business created this controversy.

82 Ibid., p. 31.

83 Greenwood and Haffa, n. 78, p. 131.

84 Ibid., p. 132.

CHAPTER III

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THE POLITICS OF NUCLEAR HAVE-NOTS

Definition of "Have-nots"

It certainly does not mean "nuclear paupers". A nuclear pauper is a country that does not have any component of the nuclear fuel cycle - mining, milling, enrichment, fuel fabrication, reprocessing and the storage of radioactive waste. There are more than fifty countries in the world with one or more components of the nuclear fuel cycle. A country like Zaire can be a bonafide "nuclear have" since it is having large quantities of uranium reserves. But it does not have even a nuclear research reactor. Similarly, without any uranium reserves, Japan can be a "nuclear have" since it has other components like enrichment, reprocessing and power reactors.

As a frontier science, nuclear activity needs huge amounts of money as well as highly advanced industrial infrastructure coupled with experts. This very nature of nuclear activity bars the entry of the poor and backward nations into this field. Thus, the race has, indeed, been between advanced countries like the US, USSR, France and Britain, and middle powers, with more than enough capabilities to aspire, and less than required capabilities

to acquire nuclear self-sufficiency. This latter category includes India, Brazil and Argentina, etc. The promising prospects of cheap availability of energy generated by the nuclear power reactors are still being underlined. The main thrust of the nuclear policies of these middle powers is to substitute the import of oil which exploits major part of foreign exchange reserves with the nuclear energy and to take their nations into advanced stage of development, which, in their opinion, would ensure them independence.

Jawaharlal Nehru, the first Prime Minister of India, told the Constituent Assembly in 1948 that "the world developed a new source of power, that is steam - the steam engine and the like - and the industrial age came in. India...did not develop that source of power...it became a slave country because of that...we are on the verge of it (atomic age)...if we are to remain abreast in the world as a nation which keeps ahead of things, we must develop this atomic energy...for peaceful purposes."¹

Who is a "nuclear have-not"? Of twenty-seven non-nuclear weapon States that had refused to sign the NPT, six States do have operating nuclear reactors as of 1 August 1987. It includes Spain - a non-party to the NPT and a

1 India, Constituent Assembly (Legislative), Debates, vol. 5, no. 1, 6 April 1948, pp. 3333-4.

member of NATO, and excludes Israel - a non-party with a brisk n-activity but does not have an operating power reactor. The other five States are Argentina, Brazil, South Africa, India and Pakistan. By virtue of its membership in NATO, Spain is considered to be a nuclear weapon State, since its security is ensured by the alliance under nuclear umbrella. According to this study, Argentina, Brazil, Israel, South Africa, Pakistan and India are the "nuclear have-nots". Five States have operating reactors and Israel's nuclear potential is universally conceded. However, it may look unreasonable to apply the NPT criterion to call these nations "nuclear have-nots", since they are not parties to the Treaty. When comparing with other Third World nations these five will become "nuclear haves" due to the comparatively advanced state of their nuclear development. But they are, indeed, "nuclear have-nots" when compared with the five Nuclear Weapon States, which is the focal point of this dissertation.

In view of the nuclear potential of these six countries, it might seem implausible to call them "nuclear have-nots". What do they lack is nuclear weapons and the sanction of the NPT to produce them. It is desirable to call the nuclear weapon States as "military nuclear haves", the non-nuclear weapon States with vast energy generating programmes such as those six mentioned above, as "civil

nuclear haves" and other countries with nil or little nuclear activity as "nuclear have-nots".

But it has been widely accepted to classify nations into nuclear haves and nuclear have-nots under the NPT. The NPT was created "to divide the nations into the nuclear haves and the nuclear have-nots".² Is it a coincidence that all these six non-nuclear weapon States (nuclear have-nots) happen to be in the Third World? "On the issue of nuclear proliferation, the global system consists of the 'haves' and the 'have-nots' with no Third World."³ When the critique against the NPT lacks the Third World dimension and depends upon the question of equality, it loses relevance since the entire world order is based on unequal tenets and the NPT regime is a part of it. The logic of inequality cannot be sustained without the Third World dimension.

The non-proliferation policies of the Super Powers have been criticized as attempts to establish "atomic

2 T.T. Poulouse, "The Third World Response to Anti-Nuclear Proliferation Strategy", India Quarterly (New Delhi), vol. 34, no. 2, April-June 1978, p. 145.

3 Aswini K. Ray, "The Third World Perspectives on Security and Nuclear Non-Proliferation: An Indian View", in John Simpson, ed., Nuclear Non-Proliferation: An Agenda for the 1990s (New York: Cambridge University Press, 1987), p. 54.

colonialism". "The dogma of proliferation is suspected as being the prerunner of atomic colonialism".⁴

But the newly acquired Third World dimension of politics under the NPT is more a consequence rather than a cause. A consequence, because other countries which belong either to the First World (Japan, Italy and Australia) or to the Second World (Romania) initially were opposed to the NPT and later accepted it due to various reasons. Similarly, the main reason of the Soviet Union's baptism into non-proliferation philosophy was its need to stop German and Japanese nuclear weapon development,⁵ rather than to prevent the Third World nations acquiring these weapons. This is not to say that with the denuclearization of West Germany

4 T. T. Poulouse, "Atomic Colonialism", The Bulletin of Atomic Scientists (Chicago), vol. 34, no. 8, October 1978, p. 60. The NPT was criticized as the "20th century version of Lord Wellesly's subsidiary alliance system". See K. Subrahmanyam, Times of India (New Delhi), 18 April 1987.

However, this "inequality" theme has been countered with the arguments that it does not have anything with racism on the part of weapon States and "nuclear inequality" is possible to be justified because "anarchic equality appears more dangerous" (than ordered inequality). See Joseph S. Nye, Jr., "NPT: The Logic of Inequality", Foreign Policy (Washington), no. 59, summer 1985, pp. 124, 126 and 130.

5 K. Subrahmanyam, Times of India, 14 February 1987.

and Japan, the Soviet Union has lost interest in the NPT. To quote George Quester, the Soviet Union, in fact, has become "more Catholic than the Pope" in regard to the proliferation question.⁶

Argentina, Brazil, Israel, South Africa, Pakistan and India (hereafter referred to as "nuclear have-nots") do have enough reasons not to accept the NPT.

- (1) All being former subjects of the Great Powers they cannot afford to ignore their bitter experiences under the foreign yoke. And since the present age is dominated by nuclear weapons they cannot simply forge the nuclear option.
- (2) The unwillingness of these countries to join either of the two military blocs leaves them without proper security guarantees. Furthermore, their ideological and regional interests often drag them into armed conflicts with neighbours. This is what is otherwise known as "proxy wars" with the two Super Powers actively supporting both the warring parties against each other.

6 George Quester, The Politics of Nuclear Proliferation (Baltimore: The Johns Hopkins University Press, 1973), p. 44. A contrary view is that after the FRG signed and ratified the NPT, the "Soviet interest in nuclear proliferation has much receded". See Shai Feldman, Israeli Nuclear Deterrence: A Strategy for the 1980s (New York: Columbia University Press, 1982), p. 180.

Here, the Super Power involvement confines to the extent of fuelling the conflict rather than solving it.

Since the formal military alignment is absent, the Super Powers do not have any obligation to directly intervene in these conflicts. This situation makes the have-not nations feel more insecure.

The list of have-nots seems to include three more Middle East nations - Iraq, Libya and Syria. They signed and ratified the NPT. To counter the nuclear capability of their common enemy - Israel - these three countries are widely believed to be indulging in clandestine nuclear weapons acquisition. If these reports, mostly journalistic, are to be believed, then the credibility of the NPT will be in jeopardy.

Mustafa Tlas, Defence Minister of Syria declared in 1984 that "if Israel should employ nuclear weapons... the Soviet Union has guaranteed that in such a case they would make nuclear weapons available to us".⁷ Similarly, Libyan leader Col. Muammer Qaddafi was reported in June 1975 as saying that "tomorrow we will be able to buy an atomic

7 Leonard S. Spector, The New Nuclear Nations (New York: Vintage, 1985), p. 133.

bomb and all its parts".⁸ Irrespective of Iraq's acceptance of the NPT and the IAEA's assurances that Iraq was observing its obligations under the NPT safeguards agreement, Israel accused Iraq of trying to manufacture nuclear weapons. Israel said that Iraq's assurances were unbelievable and the IAEA's inspection ineffective. Hence it had destroyed Iraq's Osirak nuclear installation in June 1981.

Israeli action was described as the first instance of "preventing by force the proliferation of nuclear weapons".⁹ But it is widely agreed that these three nations viz. Iraq, Libya and Syria, may not be able to produce nuclear weapons in near future.¹⁰

Why Nations Go Nuclear?

How the five NWS had opted to produce nuclear weapons is discussed in the first chapter. Deciding to do

8 Quoted by Newsweek (New York), vol. 71, no. 24, 16 June 1975, p. 27. This was hardly three weeks after Libya ratified the NPT on 26 May 1975. But Newsweek has not mentioned when Qaddafi actually made this statement.

9 Amos Perlmutter, Michael Handel and Uri Bar-Joseph, Two Minutes Over Baghdad (London: Vallentine, Mitchell, 1982), p. 155.

10 About Syria and Libya see Spector, n. 7, pp. 134 and 158.

so is naturally a culmination of one's perceptions, security needs, and capabilities and intentions in terms of resources and technological know-how. According to Lewis A. Dunn and Herman Kahn, there are eight types of events as "triggers" pressing a country to go nuclear: (a) Involvement in foreign crisis, (b) reduction in alliance credibility, (c) nuclearization of other countries, (d) weakening or breakdown of international constraints, (e) domestic crises, (f) government or leadership change, (g) increased availability of necessary resources and inputs, and (h) changed perception and utility of nuclear weapons.¹¹ But all the eight types of events need not be met by a country to go nuclear. Sometimes an event proves to be too strong in relation to others. And other events may play a lesser role. Another problem when the causes for a country to go nuclear are discussed, is the dilemma of whether to depend upon the declared policies of the country in question or to take the "undeclared" or "attributed" policies into consideration.

This dilemma is well exemplified in the nuclear politics of South Asia. At first sight only event (d) seems

11 Quoted by Bhabani Sen Gupta, ed., Nuclear Weapons? Policy Options for India (New Delhi: Sage, 1983), p. 17.

to have influenced India to conduct an atomic test in 1974.¹² However, the impact of other events cannot be ignored. India had declared in 1974 and later, that conducting a PNE did not mean deciding to produce nuclear weapons. India's restraint since then proves its commitment. In May 1972, the then Defence Minister Jagjivan Ram told the Parliament that the government was studying technology for carrying out an underground nuclear explosion for peaceful purposes.¹³ Ten months prior to this revelation, the Daily Telegraph of London (dated 27 July 1971) reported that India had "decided to start work on the development of atomic explosives and could set off her first atomic bomb in less than two years".¹⁴

When did India decide to conduct a PNE? Was it in 1971, during the deteriorating situation in East Pakistan (now Bangladesh) that made Indian intervention imminent? Or was it in 1972, as Jagjivan Ram told the Parliament? Furthermore, Mrs Indira Gandhi, the then Prime Minister, had said in 1974 that India could have conducted an atmospheric test way back around 1964 had it not signed the Partial Test Ban

12 Ibid., p. 18.

13 New York Times, 3 May 1972, p. 41:6.

14 Quoted by Gupta, n. 11, p. 5.

Treaty (in 1963).¹⁵ A final question is whether India took that decision prior to or after the NPT. Anyhow, it was the result of a decade's thinking and planning.

All events mentioned by Dunn and Kahn except the event (b) can be applied to India's decision depending on the year in which such a decision was supposed to be taken. It was reported (though unconfirmed) that Mrs Indira Gandhi, soon after became the Prime Minister in 1966, ordered for a nuclear test and developed cold feet at the last moment.¹⁶ If it was the case, at least events (c) nuclearization of other countries, (d): absence of international constraints, and (f) leadership change - can be applied.

For Pakistan, the reverse side of the South Asian coin, there are so many "declared" policies but the real intentions and capabilities are in question. For example, as Foreign Minister of Pakistan, Zulfikar Ali Bhutto had declared on 29 December 1965 at Larkana (Sind) that Pakistan would "eat grass" to make the bomb if India made one.¹⁷ This was after India started reprocessing plutonium

15 New York Times, 19 July 1974, p. 70:1.

16 Ashok Kapur, Pakistan's Nuclear Development (London: Croom Helm, 1987), pp. 72-73.

17 *Ibid.*, pp. 58, 88.

in 1964. It may be noted that Bhutto made this statement as a Foreign Minister and later he left the government. Between this time and December 1971, when he became the Prime Minister, there was no nuclear activity in the direction of making the bomb. It was only in January 1972 that Bhutto decided to go nuclear and started serious preparations. This was still two years prior to the 1974 Pokaran test by India.

Again what events attributed to Pakistan's decision to go nuclear depends upon the year in which Pakistan "really" took that decision. As for Pakistan, it has linked its behaviour to that of India and many especially in the West, have taken it for granted. Attempts have been made to "delink" India's impact on Pakistan's behaviour. Many scholars decide January 1972 as the Pakistan's year of decision and argue that since India conducted a PNE two years later in 1974, there can be no Pakistan "following India's suit".¹⁸

18 Ibid., pp. 108-9. In an earlier article that was a forerunner to the above mentioned book (n. 16), Kapur said that Bhutto "decided in 1972 - two years before India acquired nuclear status - to develop the Pakistani bomb. His decision preceded India's decision rather than 'following suit'." See, Ashok Kapur, "Pakistan's Nuclear Development: A note on Approach and History", Arms Control (London), vol. 6, no. 3, December 1985, p. 243.

However, as far as signing the NPT and establishing a Nuclear Weapons Free Zone in South Asia, are concerned, Pakistan linked its behaviour with that of India: as long as India does not agree to either of these two, Pakistan also will not agree. But India has enough reasons not to yield to these pressures. India's civilian nuclear development has started independently and any military application of nuclear technology, will be a by-product of the vast civilian programme. But somewhere the Chinese impact will come into the picture. India gives nuclear China as the main reason for its unacceptability to the South Asian nuclear weapon free zone. Similarly, it would be difficult to remove the Indian factor from the Pakistan nuclear programme. After all, India remains to be the sole adversary of Pakistan.

How other "have-not" countries have been motivated to pursue the weapons route is not drastically different from that of India and Pakistan. Until recently, Argentina and Brazil have linked their nuclear postures with one another. New civilian governments in both the countries have taken non-proliferation steps like accepting in principle mutual inspection of their nuclear facilities and the IAEA safeguards on the nuclear exports from the two countries. Raúl Alfonsín, Argentine President and José Sarney, Brazilian President, have signed a nuclear pact on 8 April 1988. The

pact requires the two States to use nuclear energy for peaceful purposes. Alfonsin said that they were considering to adopt a Latin American non-proliferation treaty that would be modelled after the Tlatelolco Treaty.¹⁹ For Israel and South Africa, the extreme hostile environment has made it imperative to produce the bomb.

The Security Dilemma of the Have-Nots

The debate on nuclear weapons vis-a-vis national security in the "have-not" countries has two dimensions, viz., a more broad and realistic dialogue among the "have-not" countries as well as with the Super Powers. A country like India or Brazil is greatly influenced by its regional atmosphere and security imperatives rather than what the Super Powers would do if it decides to produce nuclear weapons. This is very often ignored by the nuclear proliferation literature coming from the West. The universally upheld view is that the technical fixes coupled with the denial of economic assistance and other developmental aid can dissuade the "have-not" nations from going nuclear. The analogy of how the USSR, the UK, France and China have

19 Spector, n. 7, pp. 185 and 201. (For example, Argentina and Brazil have demanded China to accept IAEA safeguards on their nuclear exports to that country and succeeded.). For developments in April 1988 see Christian Science Monitor (Boston, MA), 11 April 1988, p. 11.

decided to produce the bomb, under pressure not to do so, ipso facto tells the fact that external pressure does have only limited effect in influencing a country's nuclear decision-making process.

The "have-nots" refusal to subscribe to the world-view of the Super Power is (mis)interpreted as their determination to disrupt the international norms and peace - the NPT being the first victim. It is incomprehensible how can these countries, if and when they decide to go nuclear, breach a treaty they have not at all signed.

As for their security, except Argentina and Brazil, the rest are either perpetually at war with their neighbours (Israel and South Africa) or in a state of escalating tension (India and Pakistan). The ambiguous nature of these countries' nuclear decision-making is largely due to their dilemma of other adversary's response (presumably through similar action). Here the two exceptions are Israel and South Africa where they do not have "nuclear potential" adversaries. And their decisions have been influenced by extreme hostile environment.

Nuclear Weapons for Survival

The main critique of the bomb is that it is not at all a weapon and it does not ensure one's security. Israel and South Africa seem to be the main credible exceptions

to this criticism. The credit of maintaining peace in post-war Europe has been attributed to the bomb. But Europe has had enough reasons not to fight another war.²⁰

Israel and South Africa do share some similarities: both are being boycotted by majority of the international community; they are located in an extremely hostile environment with all their neighbours aiming at their very destruction; both, by and large, depend on the Western Powers for security. The birth of Israel and adoption of the racist policy - Apartheid - by South Africa, incidentally, took place in 1948.

However, these similarities cannot preclude the contrasting situations of these two countries. Israel is a sovereign parliamentary democracy with membership in all UN bodies. Its problem is an external one, notwithstanding the recent violence in the occupied areas. By rejecting the UN partition of Palestine in 1948 between the Jews and Palestine Arabs, the Arab nations made the destruction of Israel as their aim, but not the creation of a State for Palestine Arabs. The bone of contention can only be removed when the

20 "That there has been no war in Europe for thirty years is somewhat analogous to the other fallacious doctrine that the balance of power preserved peace, by and large, in Europe between 1815 and 1914." See K. Subrahmanyam, ed., Nuclear Myths and Realities: India's Dilemma (New Delhi: ABC Publishing House, 1981), p. 59.

Arab world either adopts the policy of reconciliation that Egypt has chosen or succeeds in annihilating the State of Israel, which is unlikely. On its part, Israel's acceptance to create an Arab State in the occupied areas may be able to remove the immediate casus belli.

But as long as the present stalemate continues, which seems likely, the Israelis may depend on nuclear weapons for their ultimate survival. The world community has come to the conclusion that Israel has nuclear weapons: and the controversy might be how many does it have. As early as 1973, when its survival was threatened following the Yom Kippur War, Israel equipped its Jericho surface-to-surface missiles with nuclear war heads. Jericho has roughly three hundred mile range and would be enough to reach Cairo and Damascus. Israel developed these missiles with the help of France.²¹

Finally, pressure from both the Super Powers foiled any real attempts by Israel to use nuclear weapons.²² Israel's declared nuclear policy remains the same, namely "it would not be the first to introduce nuclear weapons

21 Russell Warren Howe, Weapons (London: ABACUS, 1980), pp. xv-xxi.

22 For an indepth description of 1973 episode, see ibid.

into the Middle East".²³ Whether it would have resorted to employ nuclear weapons or not in 1973 is a debatable question. But it has achieved all the aims which might not have been realized had it used nuclear weapons. Its gains are many:

- (1) The entire world has conceded its nuclear capabilities;
- (2) It made obvious that if and when it is needed it would not hesitate to use these weapons, and
- (3) largely due to its nuclear capabilities most of the Arab countries have practically given up the idea of attacking Israel.

Its arch enemy (Egypt) concluded the Camp David Peace Accord in 1979 and got back its Sinai Peninsula that it lost in 1967.

Israel's nuclear posture is more than "keeping the option open" and little less than a public acceptance. In reality "it has passed from the stage of 'keeping open the nuclear option' and 'bomb in the basement' postures to deployment capability".²⁴ This policy is more realistic since keeping an option open does not provide a nation with nuclear weapons for an immediate use as bomb in the basement

23 Perlmutter and others, n. 9, p. 45.

24 Christopher S. Raj, "Israel and Nuclear Weapons : A Case of Clandestine Proliferation", in K. Subrahmanyam, ed., n. 20, p. 87.

does.²⁵ Israel's journey from "thinking of doing" to the actual "doing stage" was required by its external environment.

Israel's Policy: Model for the Third World

The long history of Israel's nuclear weapons policy has all components, just as any "have-not" State does: extensive nuclear assistance from the West, covert and overt pressures from the US not to pursue a weapons path. And more - the determination and courage on the part of Israel to seek its own destiny. Its two research reactors - Nahal Soreq (with safeguards) and Dimona (without safeguards) - have been supplied by the US and France respectively.²⁶ Apart from these, it has a wide range of nuclear facilities such as plants for heavy water and reprocessing.²⁷

The US-Israeli relations were strained during the Ben-Gurion years due to the latter's nuclear activity with the help of France when the Dimona decision was taken in 1957. Israel and France described it as a "textile plant".

25 Feldman, n. 6, p. 8.

26 Spector, n. 7, p. 149.

27 Ibid.

It was only after the US request in 1960 did Ben-Gurion clarify it as a nuclear facility.²⁸

Internally, Israel has two lobbies - one anti-bomb and the other pro-bomb. Proponents of Israel Defence Force's (IDF) "traditional school" such as Yigal Allon and Yitzhak Rabin maintain that "Israel could continue to rely on conventional capability", thus does not need nuclear weapons. The pro-bomb lobby includes Shai Feldman.

Previously, Moshe Dayan maintained that Israel could not continue to compete quantitatively in the conventional arms race and it would have no choice but to base its security on nuclear deterrence.²⁹

Israel's real policy accommodates both the schools of thought. Irrespective of their views, many sections in Israel have conceded the validity of nuclear weapons. For example, Yair Evron of the Tel Aviv University, who rejected the contention that Israel's nuclear capability had affected the Arab military planning and suggested that the Arab's apprehension of Israel's conventional military capability

28 Roger F. Pajak, Nuclear Proliferation in the Middle East: Implications for the Super Powers, Monograph series no. 82-1 (Washington, D.C.: National Defense University Press, 1982), pp. 32-33.

29 Ben Mollov, "Thinking about the Unthinkable: The Nuclear Debate in Israel", The Israel Economist (Jerusalem), vol. 43, March 1987, pp. 10-11.

was a factor. Even, Evron has conceded that Israel's possible nuclear capability played some part in motivating Anwar Sadat to conclude the Camp David Accord.³⁰

Israel represents a typical Third World nation whose geo-strategic location and hostile environment made it imperative to go nuclear. It also exposes the ineffectiveness of outside pressure in influencing one's decision-making process. Not that the Super Powers did not try to stop that country's nuclear development but its determination was proved to be too strong.³¹ Even Arab warnings that they would destroy its nuclear facilities, if Israel did not give up attempts to produce the bomb, could not desist it from its chosen path. As early as in 1960, Egyptian President Gamal Abdul Nasser made it clear that they (Arabs) would destroy everything "that will enable Israel to produce the atom bomb" even if "we have to mobilize four million men to destroy it".³²

30 Ibid., p. 11.

31 Pajak, n. 28, pp. 33 and 84. Its nuclear programme was thought of aiming at reducing dependence on the US; while implementing the Symington Amendment in the case of Pakistan (before 1980), the US did not do so in the case of Israel. For more "American connivance," see Raj, n. 24, pp. 109-14.

32 Feldman, n. 6, p. 66, and corresponding footnotes 27 and 28, in p. 256.

Israel not only proceeded unabated with its weapons programme but also succeeded in thwarting its enemies' nuclear development. With Egypt signing the NPT, in fact, Israel has nothing to worry about the former's nuclear threat. Its bombardment of Iraqi Osirak nuclear reactor in 1981 was justified since Iraq was and still is at war with Israel. Iraq has persistently refused to conclude any ceasefire or armistice agreement with Israel. "Iraq is, therefore, both from the practical and legal point of view the only Arab State in a permanent state of war with Israel."³³

The sensational arrest in the US, of defence analyst Jonarthan Pollard revealed how Israel got the details of Pakistan's Kahuta enrichment plant.³⁴ At least since 1981 Israel has several times approached India suggesting a joint operation to destroy Kahuta plant: Indian involvement sought by Israel includes refuelling facility for their bombers at Jamnagar air base and active involvement of Indian Commandoes.³⁵

33 Perlmutter, n. 9, p. 12.

34 Times of India (New Delhi), 25 April 1987.

35 For more details on this subject, see Bharat Karnad, "Knocking out Kahuta", Sunday Observer (New Delhi), 17 January 1988, p. 4.

Israel-South Africa Connection

In 1977 a Soviet satellite had detected preparations for a nuclear test by South Africa in the Kalahari desert. With unusual coordination between the two Super Powers - peculiar only to the proliferation question - South Africa was compelled to abandon that test. According to the Newsweek, "the bomb South Africa had planned to set off actually had been made in Israel".³⁶

The Republic of South Africa is a country fighting against its own people. Its enemies are its people. The white minority, Pretoria regime, with the help of Western countries has developed a large nuclear infrastructure. France supplied two 922 MWe reactors, West Germany supplied enrichment equipment,³⁷ and the US supplied highly enriched uranium 235 (93 per cent, sufficient to be used in the weapons).³⁸

The nuclear co-operation between these two countries dates back to the mid-1950s. In addition to the common feature of being boycotted by the world community, they need

36 Quoted by Raj, n. 24, p. 115.

37 Spector, n. 7, pp. 226-7. The US has also supplied a 20 Mwt small research reactor in 1965.

38 John J. Berger, Nuclear Power: The Unviable Option (Palo Alto, California: Ramparts Press, 1976), p. 221.

each other in other fields also. South Africa supplies uranium and rough diamonds in exchange for Israeli nuclear technology and conventional arms. In 1966 itself, South Africa had offered Israel a nuclear testing site. Again in September 1979, an explosion in the South Atlantic Ocean, believed to be a nuclear test, was detected by an American satellite. The US network CBS suggested that it was an Israel test.³⁹ However, a panel of experts appointed by the UN had concluded that "there had been a nuclear explosion by South Africa or any other country in the South Atlantic area has not been substantiated, nor has it been fully disproved".⁴⁰

The Aims of South Africa

Unlike Israel, whose principal threat comes from neighbouring enemies, the threat to destroy racist Pretoria regime comes from its own people. Then how will it employ nuclear weapons is an interesting question. As for the support of African States to South African people, Pretoria's proven nuclear capability will discourage them from doing so. "The main danger in Southern Africa is the likely use of

39 Raj, n. 24, pp. 114-18.

40 T.T. Poulouse, United Nations and Nuclear Proliferation (New Delhi: B.R. Publishing Corporation, 1988), pp. 85-86.

nuclear terrorism by South Africa against the blacks fighting for national liberation and against neighbouring States giving shelter to these liberation movements. It is unlikely that the South African regime in its desperation to survive will hesitate in using nuclear weapons."⁴¹

Implications of these two countries' and especially South Africa's nuclear capability would be monstrous. The Southern African nations with no nuclear capabilities, coupled with the lack of the Super Power support due to the former's policy of non-alignment (most of the African countries are non-aligned) would be the targets of Pretoria's nuclear blackmail. Pretoria's nuclear-might would strengthen its political survival and so would the obnoxious apartheid policy. Hence nuclear weapons in the hands of South Africa - an "illegitimate offspring of retreating imperialism"⁴² - would make it difficult for the world community to overthrow the racist regime.

41 C. Raja Mohan, "Atomic Teeth to Apartheid : South Africa and Nuclear Weapons", in K. Subrahmanyam, ed., n. 20, p. 137.

42 Ibid., p. 131.

The Nuclearization of South Asia

The year 1988 not only marks the twentieth anniversary of signing the NPT (in 1968) but also the fortieth anniversary of the 'opening of India's nuclear option'. Jawaharlal Nehru had told the Constituent Assembly of India on 6 April 1948 that "if we are compelled as a nation to use it (atomic energy) for other purposes, possibly no pious sentiments of any of us will stop the nation from using it that way".⁴³ Until then Nehru was talking about the peaceful intensions of India's nuclear programme and his term 'other purposes' denotes other than peaceful purposes. He can be expected to go to that extent in 1948. Notwithstanding his and his successors' refutations of India's nuclear option, his statement in 1948 was the first occasion when an Indian Prime Minister was talking about the right of India to produce nuclear weapons.

This was still when there was only one nuclear weapons power (US) in the world. The Soviet Union was to take one more year to make its first bomb. Communist China was yet to be born! Even today, after forty eventful years, India is still talking about its nuclear option. This

43 India, Constituent Assembly (Legislative), Debates, n. 1, pp. 3333-4.

symbolises the confusing nuclear scenario in South Asia. Naturally South Asian politics is inter-twined with that of India. Geographically South Asia comprises India, Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka and Maldives, all members of the South Asian Association for Regional Co-operation (SAARC). Recently, Burma has been invited to join SAARC but it turned down the offer.

In a loose sense, Indian sub-continent i.e. South of Himalayas can be called South Asia. But the definitions vary. "In South Asia, a peculiar regional system has evolved. There are five major components in this system: India, Pakistan, China, the Soviet Union, and the United States."⁴⁴ India and Pakistan are bona fide members of the region, China and the Soviet Union being the immediate neighbours. The US has wide range of interests and capabilities to influence the region. Again Cohen, who has defined the dynamics of this region as "all of the members of this pentagonal system are either nuclear or near-nuclear States; none are in close alignment with any of the others, and each, in varying degree, is suspicious of the others. The closest parallel to this system is the

⁴⁴ Stephen Philip Cohen, "Balancing Interests : The U.S. and the sub-Continent", The National Interest (Washington, D.C.), no. 9, fall 1987, p. 74.

19th century European balance of power".⁴⁵

Apart from India and Pakistan, Burma and Bhutan refused to sign the NPT. The latter two countries having nothing to do with the nuclear field can be avoided from the present discussion. Thus, India and Pakistan form the matrix of South Asian nuclear quagmire. "Here we are faced with the classic dilemma, namely intentions and capabilities of two adversary nations."⁴⁶

The NPT : India and Pakistan

While India refused to sign the Treaty, criticizing it as unequal, Pakistan refused on the ground that India did not sign: 'If India signs the NPT, I will sign' so goes the Pakistani stand. Since Pakistani behaviour depends on Indian action or inaction, simple reasoning rather misleadingly points out at India as the source of nuclear tensions in the sub-continent. But this reason cannot be applied. Pakistan's enthusiasm to follow in India's footsteps is rather a recent phenomenon. While India was following the non-aligned path,

45 Ibid., pp. 74-75.

46 T.T. Poulouse, "Nuclear Polycentrism and Denuclearization of South Asia", Asia Pacific Community (Tokyo, Japan), winter 1986, p. 106.

Pakistan did not follow suit but became a member of Western military alliances (SEATO and CENTO) against the Soviets.

Here different perceptions do create confusion. India is to Pakistan what China is to India. While Pakistan can afford to trade off its nuclear option with that of India, India cannot ignore nuclear China. India is the only enemy of Pakistan. But India faces both Pakistan and China which still occupy large chunks of its territory. The long time friendship between Pakistan and China and alleged assistance given by the latter to the former in the nuclear weapons development have further weakened the Indian position. Hence any denuclearization process in the region must ensure and enhance India's security environment. It is China, not Pakistan, that has "fixed an enduring pattern of insecurity for India".⁴⁷

Apart from the inequality nature, the NPT is viewed as ineffective by India. India rejects the premise of the NPT that "the proliferation of nuclear weapons would seriously increase the danger of nuclear war".⁴⁸ It defines

47 For an excellent discussion on security complexes of South Asia, see Barry Buzan, People, States and Fear: The National Security Problem in International Relations (New Delhi: Transasia Publishers, 1983), pp. 106-11.

48 Raju G.C. Thomas, "India, the NPT and Nuclear Proliferation", Wisconsin International Law Journal, vol. 5, p. 112.

proliferation as the spread of nuclear weapons but rejects the classification of horizontal and vertical proliferation.⁴⁹ This logic is needed by the security environment of India. Pakistan needs to curb horizontal proliferation (by India). But India is faced with both horizontal (Pakistan) and vertical (China) proliferation.⁵⁰ It cannot be content with curbing the horizontal proliferation, possibly by Pakistan, through the NPT.

The point of India facing Chinese nuclear threat is contested. According to T.T. Poulouse, "there is no evidence of a Chinese nuclear threat or nuclear blackmail to India".⁵¹ But K. Subrahmanyam expresses diametrically opposite view: "...obviously these are (reported Chinese nuclear missiles in Tibet) aimed at India and not the USSR".⁵² "The experience of so many countries which have no border problem with China and yet have come to grief speaks for itself."⁵³ But the nuclear metamorphosis that

49 Ibid.

50 Ibid., p. 118.

51 Poulouse, n. 46, p. 109.

52 Times of India, 18 April 1987.

53 Inder Malhotra, Times of India, 30 April 1987.

People's Republic of China has undergone, is still more confusing.⁵⁴

The nuclearization of the region has been criticized as against internal norms and inconsistent with various treaty obligations on the part of India and Pakistan. While India comes under somewhat milder criticism regarding its obligations vis-a-vis the US and Canada, Pakistan has got a notorious record including the smuggling of sensitive nuclear technology from various Western countries. Pakistani nationals have been convicted in this regard in the US, West Germany, the Netherlands and Canada.⁵⁵ They include Dr Abdul Qadir

54 For example, China severely criticized the NPT. In 1966 China called it "absolutely unjust and unfair", "a monstrous fraud". "...the non-nuclear countries are not allowed to have anything whatsoever to do with nuclear weapons....Is there anything more preposterous under the sun?" It had declared that it "will never be party to the (NPT)...to deprive the non-nuclear countries of their rights...." See Peking Review (Peking), no. 47, 18 November 1966, pp. 34-35.

In 1987, Foreign Minister of China Wu Xueqian told the 42nd session of the UN General Assembly that "we neither advocate nor go in for nuclear proliferation; we do not help other countries develop nuclear weapons." See Beijing Review (Beijing), vol. 30, no. 40, 5 October 1987, p. 15.

55 Leonard S. Spector, "Nuclear Smugglers", Bulletin of the Atomic Scientists, vol. 42, no. 6, June-July 1986, pp. 34-36.

Khan, father of Pakistan's 'Islamic bomb' who was sentenced in absentia to four years imprisonment by a Dutch court. Later the conviction was reversed when Pakistan refused to serve Dutch court summons.⁵⁶

So far, India has never been criticized of nuclear commercial irregularities. However, it is alleged that India has received "some help" from an American firm, the Vitro Corporation to set off its first "nuclear device" in 1974.⁵⁷ But no conviction took place. However, saying that "in nuclear South Asia, nothing is 'indigenous'",⁵⁸ amounts to underestimating the technical capabilities, especially that of India. Milholin tries very hard to prove that India either violated obligations given to Canada and the US-suppliers of reactor and heavy water in 1963 respectively,⁵⁹ or it has received a secret import -

56 Ibid.

57 Howe, n. 21, p. 290.

58 Gary Milholin, "Stopping the Indian Bomb", American Journal of International Law (Washington, D.C.), vol. 81, no. 3, July 1987, p. 593.

59 Research Reactor in question is Canada India Reactor United States (CIRUS).

probably from China.⁶⁰ The list of allegations is long:

- (1) India has copied the designs of Canadian built Rajasthan reactors to build two reactors at Madras;
- (2) Its second research reactor - Dhruva, a scale up of CIRUS;
- (3) "India cannot be running its nuclear power programme honestly" (due to the shortage of heavy water), and
- (4) "In sum, India owes more duties to its nuclear suppliers than it admits".⁶¹

Similarly, Canada felt betrayed by India following the latter's nuclear test in 1974. Though, as Ashok Kapur mentioned earlier, the PNEs were not excluded in Indo-Canadian agreements,⁶² in a letter dated 1 October 1971 the then Canadian Prime Minister told his Indian counterpart that his country would deem any peaceful nuclear explosion

60 Gary Milholin, "Dateline New Delhi : India's Nuclear Cover Up", Foreign Policy, no. 64, fall 1986, p. 161. Together with the article cited at n. 58, Milholin leads to the conclusion that India violated the CIRUS agreement and its argument on the expiration clause of the Tarapur agreement between India and the US is "implausible and stubborn", n. 58, p. 594.

61 See Milholin, n. 60, p. 169; n. 58, pp. 596, 597 and 598.

62 Ashok Kapur, India's Nuclear Option : Atomic Diplomacy and Decision Making (New York: Praeger, 1976), p. 219.

by India as a violation of the clause of peaceful purposes only in the original agreement.⁶³ Refusing this unilateral interpretation of a bilateral agreement, Mrs Indira Gandhi, the then Prime Minister of India said: "It should not be necessary now in our view to interpret these agreements in a particular way, based on the development of a hypothetical contingency."⁶⁴ Going ahead with its own interpretation Canada cut off nuclear co-operation with India at the end of 1974.

Pakistan has displayed a rare blend of shrewdness and diplomatic finesse by making the French to cancel on their own, a reprocessing plant deal when it wanted to get rid of it.⁶⁵ With the arrival of A.Q. Khan from the Netherlands in 1975, Pakistan's programme has been shifted to enrichment route. Khan's predecessor, Munir Ahmed Khan, was to pursue plutonium route; but either he failed or Qadir Khan advised against plutonium route.⁶⁶ Being misled

63 William Epstein, The Last Chance : Nuclear Proliferation and Arms Control (New York: Free Press, 1975), pp. 224-5.

64 Ibid.

65 Times of India, 30 March 1987.

66 Kapur, n. 18, pp. 246 and 248.

by Bhutto that he was going to produce a plutonium bomb by using French reprocessing facility, France unilaterally cancelled the deal only to be vindicated for the breach of contract. France is trying to escape it by again offering a reprocessing plant.⁶⁷

Nuclear Weapons Free Zone in South Asia

First, it was advocated by Bhutto in November 1972, a few months after he decided to make the bomb.⁶⁸ Since 1974 it has been endorsed every year by the UN General Assembly. The US, the Soviet Union and China are supporting the proposal for NWFZ in South Asia. India rejected it citing the presence of nuclear China. Internal debate on this question is centered around those who argue that China is a South Asian country and a threat to India, e. g., K. Subrahmanyam,⁶⁹ and those who maintain that China is not a nuclear threat to India, e. g. T.T. Poulouse.⁷⁰ But Poulouse maintains that the very presence of a nuclear China will be a threat to India in the future. And his specific point is that there has been no Chinese "nuclear blackmail

67 Times of India, n. 65.

68 Kapur, n. 18, p. 252.

69 "Pakistanis (who propose the free zone in South Asia) always insist that China is a South Asian country with legitimate interests in the area." See, Subrahmanyam, Times of India, n. 52.

70 Poulouse, n. 46, p. 109.

to India".

However irreconcilable this difference seems to be, the proposal for such a zone needs to be examined. It is difficult for India to justify its objections since it has been supporting virtually all proposals to establish free zones in various parts of the world. Same set of objections can be applied to reject the Treaty of Tlatelolco that established a NWFZ in Latin America. Because nuclear America is in the backyard of the region.

It is stated that any NWFZ in South Asia would not foreclose India's nuclear option.⁷¹ While Pakistan accepts nuclear deterrence, India gets confused itself by outrightly rejecting the concept of deterrence. And more (in India) "a doctrine has not been developed to this very day".⁷² The concept of Nuclear Weapons Free Zones has been devised, as a part of the Super Power strategy, to curb horizontal proliferation.⁷³ No NWFZ requires the nuclear

71 Ibid.

72 Feldman, n. 6, p. 148.

73 T.T. Poulouse, "The United Nations and Arms Control : Nuclear Proliferation", in The United Nations and the Maintenance of International Peace and Security, A UNITAR (United Nations Institute for Training and Research) Publication (Dordrecht: Martinus Nijhoff, 1987), p. 391.

weapon States to give up their weapons. Unlike in the case of the NPT, India followed an inconsistent policy. While rejecting the classification of "nuclear haves and have-nots" in the NPT, India apparently accepted it in the concept of NWFZs.

Had it rejected the very concept of NWFZs elsewhere, its rejection of such a zone in South Asia would have gained acceptance.

Finally, the nuclear have-nots as a whole reject the NPT regime on the following grounds:

- (1) "The norms, rules, procedures...are suspected as instruments of technological and military domination".
- (2) "The NPT regime is discriminatory truly reflecting the dichotomy of the nuclear haves and have-nots".
- (3) "They believe that the policy of 'locking up of technology' is intended to keep them in perpetual technological bondage."
- (4) In their opinion nuclear proliferation is a political problem.
- (5) An NPT regime that cannot stop the vertical proli-

feration "can only be a marginal non-proliferation regime", and

- (6) The have-nots regard restrictions other than that of IAEA Statute and the NPT (such as supplier's guidelines) as impositions on their sovereignty.⁷⁴

74 The entire preceding analysis is taken from *ibid.*, p. 400.

CHAPTER IV

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NPT REGIME AND SAFEGUARDS : AN ASSESSMENT

Safeguards constitute a vital component of the NPT regime: policing against non-compliance of various bilateral and international commitments by the have-not States. They have been created by the nuclear haves to restrict the nuclear activities of the have-nots to peaceful purposes only. Thus, the whole purpose of safeguards is to stop the horizontal proliferation. Safeguards were there before the NPT came into existence.

Apart from the exclusion of the Nuclear Weapons States, whose nuclear potential poses the single greatest threat to the world, safeguards cannot be imposed on "indigenous" nuclear facilities in the NNWSs. They will be imposed only when a NNW State imports nuclear material or technology from either a nuclear supplier or from the International Atomic Energy Agency (IAEA). A nuclear "have-not State", signatory to the NPT is also required to place all its nuclear activities under full scope safeguards - irrespective of the fact that they are 'indigenous'

or 'imported'. The "haves" and "have-nots" share opposite views on the desirability and effectiveness of safeguards.

Safeguards are described as "a device by which control is exercised on all forms of peaceful nuclear activities in order to ensure that no disguised production of nuclear weapons can take place".¹ They were "deliberately devised by (nuclear haves)...to prevent nuclear proliferation, though essentially to retain a monopoly over the entire nuclear fuel cycle technology".² Advanced nations' insistence on safeguards is analogous to their desire to keep technological monopoly during the nineteenth century. "Attempts to control the pace, direction, and flow of nuclear technology in the developing countries should be viewed as a continuation of earlier attempts to maintain hegemonistic controls over weaker nations."³

1 Ryukichi Imai, Nuclear Safeguards, Adelphi Papers, no. 86 (London: International Institute for Strategic Studies), March 1972, p. 1.

2 T.T. Poulouse, "India and the Nuclear Safeguards Controversy", India Quarterly (New Delhi), vol. 35, no. 2, April-June 1979, p. 153.

3 M. Zuberi, "Nuclear Safeguards: The Servitudes of Civilian Nuclear Technology", in K. Subrahmanyam, ed., Nuclear Myths and Realities: India's Dilemma (New Delhi: ABC, 1981), p. 20.

The advanced countries' contribution to the belief that horizontal proliferation alone threatens world peace enables them to support the safeguards system. And the contrary view that vertical proliferation is, in reality threatening the world, is held by the "have-nots". Like the NPT, the differences of opinion on safeguards seem to be irreconcilable.

History

The earliest reference to the term "safeguards" can be found in the declaration by the leaders of three States - the United Kingdom, the United States of America and Canada - issued on 15 November 1945. They stated that "no system of safeguards that can be devised will of itself provide an effective guarantee against the production of atomic weapons bent on aggression".⁴ The Baruch Plan of 1946 had also proposed international control over atomic technology. Again it was introduced by President Eisenhower through his "Atoms for Peace" programme, of course, in a modified version: fullest possible nuclear cooperation was promised in exchange for a commitment on the part of the recipient country to use imported nuclear material and

4 Poulouze, n. 2, p. 153.

technology for peaceful purposes. This bilateral commitment was called "Agreement for Cooperation".

In 1958, one year after it came into existence, the IAEA started a small division of safeguards in its Vienna headquarters. There were five professionals and two secretaries in 1959.⁵ As the IAEA became institutionalized, the US started transferring its rights to apply safeguards to the world body.⁶ The agency's first safeguards document, INFCIRC/26, was approved by the Board of Governors in 1961.* It was only in 1962 that the first inspection by IAEA took place at a research reactor in Norway.⁷

Safeguarding the atom is the statutory obligation of the Agency. Article III.A.5 of the Statute authorizes the Agency to "establish and administer safeguards designed to ensure that special fissionable and other materials... made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose". It further authorizes the Agency to "apply safeguards, at the request of the parties,

5 H. Grumm, "IAEA Safeguards: Milestones in Development and Implementation", IAEA Bulletin (Vienna), vol. 29, no. 3, 3/1987, pp. 29-30.

6 Ibid., p. 29.

* INFCIRC stands for Information Circular.

7 Grumm, n. 5, p. 30.

to any bilateral or multilateral arrangement, or at the request of a State, to any of that State's activities in the field of atomic energy".⁸

In 1965, INFCIRC/26 was replaced by a more elaborate document, INFCIRC/66, which was revised in 1966 and 1968. It (INFCIRC/66/Rev.2)⁹ represents the pre-NPT safeguards and is still being applied in the case of non-NPT parties, such as India.

Pre-NPT and Post-NPT Safeguards

The first 1961 safeguards document - INFCIRC/26 - was to cover reactors less than 100 megawatts thermal output. By this time there was no operating reactor in the world but only research reactors. In 1964 the scope of safeguards was extended to reactors of over 100 MW(th). The system was further extended in 1966 by additional provisions for reprocessing plants, and in 1968 by further provisions for safeguarding nuclear material in conversion and fabrication plants. But the pre-NPT system did not apply safeguards to the enrichment plants.¹⁰

8 Benjamin Sanders, Safeguards Against Nuclear Proliferation, A Stockholm International Peace Research Institute Monograph (Cambridge, Mass: The MIT Press, 1975), p. 95.

9 IAEA Bulletin, n. 5, p. 30.

10 Ibid., p. 30; Sanders, n. 8, pp. 5-6.

Pre-NPT safeguards were used to be applied to the nuclear facilities, set up with external help. In other words, they were "facility oriented".¹¹ The first treaty requiring "full scope safeguards" by the IAEA was the Treaty of Tlatelolco concluded in 1967.¹² Unlike pre-NPT system based on INFCIRC/66/Rev.2 these "full-scope safeguards" are applied to the entire nuclear activities of a NNWS. Since the Tlatelolco Treaty confines to a particular region, i.e., Latin America, its impact has been limited. Article III(1), (2) and (3) of the NPT made it obligatory on the part of the NNWSs to place all their nuclear activities under safeguards. Likewise, the IAEA approved a new safeguards document - INFCIRC/153 - (corrected) in 1972 with 97 basic articles, (altogether 116). In fact, it is an "improvement" of the previous system and has come to be called the "Blue Book".

All signatories (NNWSs) to the NPT are required to conclude an agreement with the IAEA for safeguards on their nuclear activities based on the 'Blue Book'. The NPT and the so-called "full-scope safeguards" have perpetuated hitherto unequal relationship between the nuclear "haves"

11 Zuberi, n. 3, p. 6.

12 IAEA Bulletin, n. 5, p. 30.

and "have-nots". Further insistence on "full-scope safeguards" as a precondition to nuclear co-operation by supplier nations such as the US and Canada has worsened the status of NNWSs. The US, Canada, Sweden and Australia have adopted this policy affecting the reactor and fuel sales to Argentina, Brazil, India, Israel, Pakistan and South Africa.¹³ This "intolerable demand" for "full-scope safeguards" as a precondition, to quote, Homi Jehangir Bhabha, "is as if not only the recipient of aid were to be put under bondage but his children, his grandchildren and all succeeding generations for ever and ever".¹⁴

On basically three circumstances, safeguards are applied:

- (1) The parties to the NPT and the Treaty of Tlatelolco should accept full-scope safeguards;
- (2) Non-parties to either of the two treaties but dependent on nuclear imports from suppliers who take a strict view of Article III(2) of the NPT must submit to similar safeguards;
- (3) Non-parties receiving supplies from the Agency or from suppliers who take a permissive view of Article III(2)

13 Leonard S. Spector, The New Nuclear Nations (New York: Vintage, 1985), p. 234.

14 Zuberi, n. 3, p. 19.

must merely submit to controls on any assistance received. In this case document INFCIRC/66/Rev.2 is applied; and non-parties who need no outside assistance or those receive all assistance from other non-parties to the NPT, need not submit themselves to control at all.¹⁵

Second point is the bone of contention between the "haves" and "have-nots". Countries like India and Brazil, are with all their vast indigenous nuclear programme, required to accept full-scope safeguards whenever they seek assistance from the supplier nations. Asking to put indigenous programmes under safeguards is nothing but indirectly imposing the NPT.

The Paradox of Safeguards

When a country has signed the NPT, it means that country has foreclosed its nuclear option. But again requiring it to accept safeguards amounts to suspecting its political integrity. Mostly to negate this criticism, all Nuclear Weapon States including China are allowing the IAEA safeguards on some of their civilian plants.¹⁶ Since

15 Paul C. Szasz, "The Adequacy of International Nuclear Safeguards", The Journal of International Law and Economics (Washington, D.C.), vol. 10, 1975, pp. 427-8.

16 Spector, n. 13, pp. 239-40, 185 and 201.

it does not include their military nuclear installations, this offer is ridiculous. The safeguarded installations are in those countries who have foreclosed their nuclear options. There are fourteen unsafeguarded facilities in five States including India, Israel, South Africa and Pakistan.¹⁷ These facilities are enough to make the NPT regime defunct.

During 1984, the IAEA conducted 1,820 inspections at 474 installations in 52 nations. It involved 434 personnel and a budget of almost \$ 34 million - 35 per cent of the total budget of the Agency.¹⁸

That so far no major non-compliance has been detected by the IAEA ipso facto makes it clear that either the parties are not illegally diverting material and weapons grade fuel or the system has not been effective.¹⁹ Either way the rationale to spend 35 per cent of the total budget of the IAEA on safeguards can be questioned. It may well be argued that the effectiveness of the system discourages

17 Allan S. Krass, Verification: How Much is Enough? (London: Taylor & Francis, 1985), p. 231.

18 Ibid., p. 230; Spector, n. 13, p. 238.

19 However, in 1984 the IAEA "successfully uncovered and resolved the first acknowledged case of non-compliance with its regulations in the shipment of depleted uranium to Israel from Luxembourg." See Spector, n. 13, p. 238.

nations, from violating it. However, it may be noted that those who accept safeguards have not criticized them,²⁰ and the main criticism comes from non-signatories who do not at all have belief in the NPT philosophy. And their main criticism is against the NPT and not safeguards.

The twin objects of IAEA safeguards are: (a) the timely detection of the diversion and (b) the deterrence of such diversion by the risk of early detection.²¹ But the Agency is not a police force, nor is a safeguards inspector, a policeman with an open search-warrant.²² Practical considerations such as issuing visa and the travel time the inspector takes to reach the installation would give one country opportunity to escape from timely detection. Under the INFCIRC/153, 24 hours advance notice is given for routine inspections and for special inspections the access should be given "as promptly as possible". Non-NPT safeguards such as INFCIRC/66/Rev.2 prescribe one week advance notice for routine inspections and 24 hours for

20 L.W. Herron, "A Lawyer's View of Safeguards and Non-Proliferation", IAEA Bulletin, vol. 24, no. 3, September 1982, p. 34.

21 Nuclear Energy and Nuclear Weapon Proliferation, A SIPRI Publication (London: Taylor and Francis, 1979), p. 180.

22 Herron, n. 20, p. 35.

special one.²³

Furthermore, when an inspector finds some discrepancy, he is expected to inform the Agency's Director General of the event, in turn the Director General will have to put the matter before the Board of Governors of the IAEA. The Board is organized in such a way to convene it at any time needed.²⁴ In the absence of precedents, it is impossible to doubt the effectiveness of the Agency's system. When the Agency concludes that there has been a case of non-compliance, it again has to refer the matter to the UN Security Council.

In close co-operation between the East and West to bring non-signatories into the safeguards trap, the so-called Zangger Committee, named after its Swiss Chairman Claude Zangger, adopted a "trigger list" in August 1974. The London Nuclear Suppliers Group added more items in 1976 and adopted in 1978. Any export of items in this list would "trigger" (or require) safeguards and conditions such as (a) the recipient's assurance explicitly to exclude uses which would result, in any nuclear explosive device; (b)

23 Ibid.

24 Ibid., p. 37.

effective physical protection of the items supplied; and (c) the application of IAEA safeguards strictly in accordance with the Agency's rules pertaining to the duration and coverage of those safeguards.²⁵

A Critique of Safeguards

Israel, a non-NPT State, destroyed Osirak nuclear plant of Iraq - an NPT State - stating that the latter was trying to make the bomb. Sigvard Eklund, the then Director General of the IAEA, while reporting to the UN Security Council on Israeli action had commented that Israel had "evidently not felt assured by our findings and by our ability to continue to discharge our safeguarding responsibilities satisfactorily".²⁶

Certainly, Israel does not have belief in the effectiveness of the IAEA. It thinks that the Agency "is highly politicized. For instance in the Iraqi case, only representatives of what Iraq perceives to be friendly nations inspected Iraq's reactor and rather superficially at that".²⁷

25 Nuclear Energy and Nuclear Weapon Proliferation, n. 21, p. 242.

26 IAEA Bulletin, vol. 24, no. 4, December 1982, p. 7.

27 Amos Perlmutter, Michael Handel and Uri Bar-Joseph, Two Minutes Over Baghdad (London: Vallentine, Mitchell, 1982), p. 161. Though this is the view of the authors, Israel seems to be sharing the same view.

Even the US has indirectly cast doubt on the IAEA safeguards when it opposed the Brazil-German deal and France-Pakistan reprocessing plant deal - both were to be under safeguards. Many criticize IAEA safeguards on grounds of equality and legality.

Homi Bhabha said: "The elaborate safeguards provisions of the present draft are intended to ensure, if I may use an analogy, that not the slightest leakage takes place from the walls of a tank, while ignoring the fact that the tank has no bottom."

To quote V.C. Trivedi, such safeguards are "like an attempt to maintain law and order in a society by placing all its law-abiding citizens in custody, while leaving its law-breaking elements free to roam the streets".²⁸

Moreover, through the uneven stress on safeguards "the disarmament function of the Agency was unceremoniously discarded... the Atomic Robin Hood was transformed into an Atomic Sheriff".²⁹ The IAEA Statute did not mention the terms non-proliferation and proliferation. Its mandate is

28 Quoted by Poulouse, n. 2, pp. 156 and 157.

29 Zuberi, n. 3, p. 4.

to deal with peaceful uses of atomic energy.³⁰ Allowing itself to be used to curb horizontal proliferation, by the IAEA, is to discharge its functions partially and in a rather biased nature.

CONCLUSION

1. The Nuclear Non-Proliferation Treaty and its other components have institutionalized the hitherto bifurcated world into nuclear "haves" and "have-nots".
2. The absence of the "have-nots" in the NPT regime made it vulnerable. Those who do not need nuclear weapons of their own (such as Japan, West Germany, Poland and East Germany) and those who cannot make them on their own (Bangladesh, Nepal, Vatican City and Botswana) have signed and ratified the Treaty.
3. Those who need nuclear weapons and can make have rejected the Treaty.
4. Describing the NPT as a success just because no additional member has, despite Indian attempt and retreat, joined the nuclear club is a post hoc fallacy.

³⁰ Herron, n. 20, p. 32.

5. It is equally fallacious to call the Treaty an utter failure. Because it succeeded in establishing the nuclear (horizontal) proliferation an international taboo.

6. Its impact on "threshold" countries has been marginal. Their reasons for not going nuclear are partly domestic and partly regional.

7. The unequal nature of the Treaty has widened with the failure on the part of Super Powers to assist poor nations in the peaceful applications of atomic energy and to conclude a treaty on general and complete disarmament.

8. By rejecting the Treaty, the "have-not" nations have proved that there is a third component (not Third World) in the bipolar world.

9. The "have-not" nations pursued a via media by passively opposing the norms and rules prescribed by the Super Powers as well as by not actively challenging the authority of the latter.

10. The "have-nots" are following the NPT without signing it. Unlike the "haves", "have-nots" failed to present a common cause.

11. By not strictly enforcing their domestic laws as well as the NPT obligations against nuclear smuggling from their countries, the Super Powers, especially the Western nations are not living up to the expectations.

12. The NPT has singled out the middle powers such as India, Argentina and Brazil. The Super Powers do not want these nations to become nuclear weapons States so that they would not be able to challenge their authority. Smaller States, too, do not wish these nations to go nuclear so that there would be no threat to their security.

13. Since the proliferation is a political problem, technical fixes are unlikely to yield the desired results.

14. The acquired coercive nature of the NPT regime, due to the inclusion of other punitive components such as the US Nuclear Non-Proliferation Act and various amendments to the 1961 Foreign Assistance Act, has, in fact, increased the apprehensions of the "have-nots" regarding the motives of the Super Powers.

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