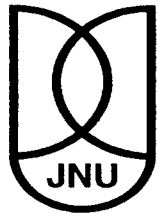
INDO-US NUCLEAR DEAL: MAJOR LEGAL ISSUES

Dissertation Submitted to Jawaharlal Nehru University in Partial Fulfillment of the Requirements for Award of the Degree of

MASTER OF PHILOSOPHY

Mohit Kumar Gupta



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July 27, 2007

DECLARATION

I declare that the dissertation entitled **INDO-US NUCLEAR DEAL: MAJOR LEGAL ISSUES** submitted by me in partial fulfillment of the requirements for the award of the degree of **MASTER OF PHILOSOPHY** of Jawaharlal Nehru University is my own work. The dissertation has not been submitted for any other degree of this University or any other university.

Mohit Kumar Gupta

Mohit Kumar Gupta

CERTIFICATE

We recommend that this dissertation be placed before the examiners for evaluation.

B.S. Chimni

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Chairperson, CILS

Dr. V. G. Hegde
Supervisor

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- Mohit Kumar Gupta

ABBREVIATIONS

AEA: Atomic Energy Act

AEC: Atomic Energy Commission

BARC: Bhabha Atomic Research Centre

CIRUS: Canada India Research United States

CISR: Council for Scientific and Industrial Research

CRS: Congressional Research Service

CTBT: Comprehensive Nuclear Test Ban Treaty

DAE: Department of Atomic Energy

ECOSOC: Economic and Social Council

ENDC: Eighteen Nation Disarmament Commission

EURATOM: European Atomic Energy Community

FBR: Fast Breeder Reactor

FCUN: First Committee of the United Nations

FMCT: Fissile Material Cut-off Treaty

GATT: General Agreement on Tariffs and Trade

GSLV: Geo-stationary Satellite Launch Vehicle

IADA: International Atomic Development Authority

IAEA: International Atomic Energy Agency

INFCIRC: Information Circular

INSS: Institute of National Security Studies

ITER: International Thermonuclear Experimental Reactor

MTCR: Missile Technology Control Regime

NCRWC: National Commission to Review the Working of the Constitution

NPCIL: Nuclear Power Corporation of India

NPT: Nuclear Non-Proliferation Treaty

NSG: Nuclear Suppliers' Group

NWS: Nuclear Weapon State

NNWS: Non Nuclear Weapon State

PHWR: Pressurized Heavy Water Reactor

PNE: Peaceful Nuclear Experiment

PREFRE: Power Reactor Fuel Reprocessing

PTBT: Partial Test Ban Treaty

SIPRI: Stockholm International Peace Research Institute

TIFR: Tata Institute of Fundamental Research

UNGA: United Nations General Assembly

UNDC: United Nations Disarmament Commission

UNSC: United Nations Security Council

VCLT: Vienna Convention on the Law of Treaties

WTO: World Trade Organization

GLOSSARY

Atom: An atom is a particle of matter that uniquely defines a chemical element. An atom consists of a central nucleus that is usually surrounded by one or more electrons. Each *electron* is negatively charged. The nucleus is positively charged, and contains relatively heavy particles known as *protons* and *neutrons*

Atomic energy: The energy liberated by a nuclear reaction, (fission or fusion) or by radioactive decay.

Breeder reactor: A nuclear reactor which produces more fissile atoms than it burns

BWR: Boiling water reactor, in which water is used as coolant and moderator and allowed to boil in the core.

Coolant: A liquid or gas which is circulated through or about the core of a reactor to maintain a low temperature and prevent the fuel from overheating. If the coolant is very hot it can be used to give power. Common coolants are water, carbon dioxide, liquid sodium and sodium potassium alloy.

Critical: The term used to describe the condition in which a chain reaction is being maintained at a constant rate which is self sustaining.

Fast Breeder Reactor: A reactor that operates with fast neutrons and produces more fissionable material than it consumes.

Fissile: Capable of undergoing fission; sometimes used to mean capable of fissioning when hit by a slow neutron. For example U-233, U-235, Pu-239 and Pu-241 are fissile.

Fission: A nuclear reaction in which a heavy atomic nucleus like uranium splits into two proximately equal parts, at the same time emitting neutrons and releasing very large amounts of nuclear energy. Fission can be spontaneous or it may be caused by the impact of neutrons, an energetic charged particle or photon.

Fusion: A nuclear reaction between light atomic nuclei as a result of which a heavier nucleus is formed and large quantity of nuclear energy is released.

Heavy water: Deuterium oxide. Water in which the hydrogen is replaced by deuterium. It is used as both a moderator and a coolant.

Isotope: Atoms of the same element that is having the same atomic number but different mass number.

Moderator: A substance used in nuclear reactors to reduce the speed of fast moving neutrons produced by nuclear fission. The slow neutrons are particularly effective in causing fission.

MWe: Megawatts (electrical) i.e., 1000 kilowatts of electric energy.

Nuclear Explosion: The rapid fissioning of a large amount of fissionable material

Radiation: A term which embraces all the ways in which energy is given off by an atom.

R& D: Research and development

Reprocessing: The procedure of removing fission products from fuel before reusing it

Thorium: The radioactive element having atomic number 90 and atomic weight 232.

Uranium: The radioactive element having atomic number 92 and atomic weights 233 235 and 238.

Chapter I

Introduction

India's relationship with USA in the field of nuclear technology commenced in March 1956 when an Agreement was signed between the two States[1]. After Indo-China conflict in the year 1962 another landmark agreement between the two States was signed in 1963.[2] This agreement was expected to facilitate the close cooperation between India and the US in the field of nuclear energy development. However, to carry out the legal obligations arising out of the agreement, a separate contract was required to be signed. The terms of the new contract introduced several new issues which were not contemplated under the text of the principal agreement. Many ambiguities and lacunas that characterized the framing of the legal text gave birth to differing interpretations and diverging understandings between the parties. Such diverging interpretations were the aftershocks of India's 1974 peaceful nuclear explosion and this lead to serious problems in the implementation of that Agreement. In such a situation France also emerged as the third party for the supply of uranium fuel to India. Ultimately, the 1963 Agreement could not yield the desired results and ceased to remain in force after 25th October 1993.

The present bilateral endeavour to enter into another 123 Agreement after more than forty years when India had entered into one such Agreement with US[3] will be acid test to both countries. US initially started cooperating in the nuclear field

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[1] Although, there existed pre-independence relationship as well but that was more or less during the world-war period for the Indian raw material supply of thorium and princely ambitions for having relationship with the superpower such as U.S. To increase his influence, the Dewan of the princely state of Travancore, C.P. Ramaswamy Iyer, allowed the minerals attaché of the US Embassy to survey the region's monazite sands in the hopes of attracting bids from US firms for concessions. These sands were sought by a number of countries, including the United States, because when processed, they yield a number of "rare earth compounds" including thorium. [Note: Prior to the Second World War, these sands had been extracted by the United States, Britain, France and Germany for use in the gas mantle and lamplight industry; however, after the start of the war, the India's War Trade Intelligence Department tightened control for fear that Germany would attempt to refine the sands for thorium. The Indian Atomic Energy Act of 1948 classifies thorium as a source material for atomic energy.]
—Itty Abraham, *The Making of the Indian Atomic Bomb* (London: Zed Books, 1998), p. 57.

[2] This was the first Agreement for Cooperation between the Government of the United States of America and Government of India Concerning the Civil Uses of Atomic Energy and this Agreement was as per the section 123 of U.S. Atomic Energy Act 1954 and therefore is also referred as 1963's 123 Agreement. This Agreement was signed at Washington on August 8, 1963 and entered into force on 25th October of the same year.

[3] Agreement is provided in the Annexure I

with India only after President Eisenhower's "Atoms for Peace Programme" was launched in 1953[4]. Therefore, an attempt will be made to analyse the U.S. law and policy vis-à-vis Indian law and policy after the Atoms for Peace period[5] (David Fischer: 153).

The Joint Declaration issued by the Indian Prime Minister and the President of United States on 18 July 2005[6], would not only provide us opportunities to revisit our past nuclear relations with the United States but also this gives us an opportunity to measure the legal and policy intricacies of the relationship between the two, especially after we failed to seek compliance of 1963 such agreement. This "123 Agreement" with the U.S. is to be entered by India without being a member of Nuclear Non-Proliferation Treaty (NPT-1968). So far, more than twenty-three such 123 Agreements have been entered into by the U.S. and none has been with a non-signatory of the Nuclear Non-Proliferation Treaty. The United States' 1978 Act (Nuclear Non-Proliferation Act) prohibits it to do so[7]. However, the present "123 Agreement" shall be an exceptional agreement to be negotiated with a non-party to the NPT. To enter into such an agreement US had to pass a law to provide for an exception in India's favour, which it did in December 2006 by passing Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act[8].

The prevention and non-proliferation of the nuclear weapons has been a major goal of the NPT and the Comprehensive Test Ban Treaty-1996 (CTBT). However, this, in no case can be seen as an impediment to the development of peaceful nuclear co-operation and activities associated therewith, for generating the energy for its consumption in the developmental process. As Prime Minister Nehru stated in 1952 that:

[4] It was an outcome of a speech delivered by U.S. President Eisenhower on 8th December 1953 at the General Assembly Session which in the Year 1954 was adopted as UNGA Resolution.

[5] The period after 1953 till 1977 is known as 'Atoms for Peace period'.

[6] Provided in Annexure III

[7] Section 401, of the U.S. Nonproliferation Act 1978.

[8] Passed by the U.S. Senate and subsequently signed by President Bush on 16th December 2006.

"We are interested in atomic energy for social purposes. Atomic Energy represents a tremendous power. If this power can be utilized as we use hydroelectric power, it will be a tremendous boon to mankind, because it is likely to be more available and cheaper than the building of huge hydroelectric works. Therefore we are interested in the development from the social point of view." [9]

It is said that India's quest for research in the nuclear field began in mid 40's when Homi J. Bhabha initiated the foundation of Tata Institute of Fundamental Research (TIFR) followed by independent India passing the Atomic Energy Act-1948 (AEA) and later AEA-1962 was enacted. India's continuous progress since the establishment of TIFR made US also to cooperate with India but India however did not sign NPT for it's discriminate division of the world as 'Nuclear-haves' and 'Nuclear have-nots'. However, US continued to co-operate with India until India detonated its first nuclear device in May 1974. But, soon afterwards US amended its law and helped constitute the Nuclear Supplier Group (NSG) or the London Club as known in common parlance. Through this nuclear club U.S. not only denied its assistance to India in this field, but it also moved other countries to stop nuclear co-operation with India. Since then it has been a period of 30 years that India was continuously making endeavors on its own and more so after India again detonated its nuclear devices in May 1998 and then again faced toughest period in its developmental work in the nuclear field.

India's Relations with the United States have seen many vicissitudes since Independence and since that time, India has been positively engaged with United States in multifarious fields of human endeavours. The field of 'Nuclear Energy Co-operation' has been among such areas requiring legal and policy assessment.

A. BACKGROUND OF THE STUDY

9 The Hindu (Madras), 14 March 1953.

The fission and nuclear fusion[10] reactions hold the promise of providing mankind with a vast source of energy thereby reducing our dependence on fossil fuels for our energy requirements. Nuclear energy programme has also placed at our hands weapons of enormous destructive power. It is left to us to use nuclear energy either for peaceful purposes or destructive purposes. It is to be remembered that solar energy that which supports life processes on this earth, is derived from nuclear fusion reaction.

As mentioned above Indian efforts to develop this energy from the fission reaction began soon after its independence by passing the Atomic Energy Act in 1948 and by the establishment of Atomic Energy Commission the same year. The Department of Atomic Energy (DAE) was established in the year 1954. DAE has ever since been engaged in the development of nuclear power technology, application of radiation technologies in the various other fields such as agriculture, medicine, industry and basic research have been its other major achievements. India was an early beneficiary of the U.S. sponsored 'Atoms for Peace' Programme as launched in 1953. This programme was intended to stem the proliferation of nuclear weapons by offering access to civil uses of nuclear technology in exchange for pledges not to apply the technology to weapons purpose. Based on this prevailing atmosphere of trust in the early Atoms for Peace years, Canada in 1955 supplied the CIRUS[11] 40-Mwt Heavy Water Modulated Research Reactor. In the year 1956, the Research Reactor APSARA[12] at Trombay became critical.

Thus, India became the first country in Asia outside Soviet Union to possess nuclear capability. The early years of 1960s saw the inauguration of Atomic Energy Establishment at Trombay, which subsequently was renamed, as Bhabha

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[10] There are many nuclear transformations by which the nucleus of an element changes into the nucleus of another element. Examples of these nuclear reactions are radioactive decay, artificial transmutation, nuclear fission and nuclear fusion. As a result of this transformation a large amount of energy is released. In the fission reaction a heavy nucleus splits where as in the fusion the nuclei of two lighter elements combine. In both the processes of splitting and combining a large amount of energy is released. The physical science has successfully tapped the energy from the fission reaction, but attempts to tap the energy from fusion process are still being made.

11. CIRUS (Canada India Reactor United States.) is a research reactor at the Bhabha Atomic Research Center BARC in Trombay near Mumbai, India. CIRUS was supplied by Canada in 1954, but uses heavy water supplied by the U.S. (hence its name). It is the second oldest reactor in India. It first went critical on July 10, 1960

[12] This was a research reactor with BARC which attained criticality on 4 August 1958.

Atomic Research Centre(BARC) and the Parliament enacted a new Atomic Energy Act in1962 replacing the 1948 Atomic Energy Act. The following year India concluded an Agreement with U.S. for uranium supply to Tarapur Reactor ("123 Agreement") and the same year it concluded Agreements with a few other States for co-operation in peaceful uses of Nuclear Energy including Canada, Denmark and Poland[13]. The Indian representative to the NPT negotiations in Geneva insisted on balanced obligations between nuclear weapons states and non-nuclear weapons states. This speech underlined the Indian shift from seeking nuclear guarantees to the desire for the elimination of nuclear weapons (George Perkovich 1999:115). Later the Indian representative to the Eighteen-Nation Disarmament Committee (ENDC) suggested that the development of Peaceful Nuclear Explosions (PNEs) be permitted for developing countries under international observation and inspection (Shyam Bhatia 1979:130) .In response to this in February 1967, US President Lyndon Johnson sent a message to the ENDC in which he expressed the necessity of nuclear nonproliferation and equated PNEs with nuclear weapons (Mirchandani 1968:134). As a caveat to those states wishing to utilize PNEs for development projects, he stated that the United States would be ready to provide PNE services to other nations, under the proper controls and at a reasonable cost. In October of the same year, India announced before the UN General Assembly that it would not sign the NPT because:[14]

> Certain Non-nuclear countries could have produced Nuclear Weapons several years ago had they desired, but have refrained from doing so. It can scarcely be argued that this policy of restraint and self-discipline should result in their being deprived of the benefits of the development of peaceful nuclear technology while the Government of India continues to be in favour of the non-proliferation of nuclear weapons, it is equally strongly in favour of the proliferation of nuclear technology for peaceful purposes, as an essential means by which the developing countries can benefit from the best advances of science and technology in this field.

Thereafter, India continued its advancement in the field of nuclear energy and Tarapur Reactor in 1970 became India's first Nuclear Power Station. In the year 1974, India for the first time demonstrated the PNE to become the first country outside the P-5 States to posses the nuclear weapons. The United

[13] Brief Annual Report: 1963-64," Department of Atomic Energy, Government of India, p. 25.

14 See G.G. Mirchandani (1968), *India's Nuclear Dilemma*, New Delhi: Popular Book Services, p. 149.

States responded by passing Nuclear Non-Proliferation Act in the year 1978, which imposed tough new requirements for U.S. nuclear exports to non-nuclear weapon states including India. By the passage of Nuclear Nonproliferation Act, U.S. set aside its 1963 Agreement with India and thus stopped supplying Uranium for Tarapur plant although, later France, Russia and even China supplied the fuel (David Fischer 1997).

In the backdrop of all these developments, India again detonated five nuclear devices in the summer of 1998. The United Nations Security Council (UNSC) passed the Resolution 1172[15] condemning the Indian tests and thereafter many countries, including the United States, imposed sanctions on India. With the passage of time, the demands of economic globalization began to entrench deeper in the international framework. The idea of sanctions on India appeared to the world community as an impediment to the development of trade and commercial activities and thus States began lifting the sanctions imposed against India. In that progression, India came much closer to the United States and later they both signed a Joint Statement on 18 July 2005.

The Joint Statement recognized India, *inter alia,* "as a responsible state with advanced nuclear technology" and declared "India should acquire the same advantages as other such states". The meaning and significance of such wording and the value that can be accorded to them under international law needs careful scrutiny. How these statements are going to transform the existing nuclear regime when the matter explicitly impinges on the civil nuclear co-operation between the two states also needs closer reflection. The impact and ramifications of the emerging bilateral nuclear cooperation regime between the US and India, on the existing nuclear non-proliferation regime calls for critical consideration on the part of international legal scholars.

B. REVIEW OF LITERATURE

The legal and policy issues concerning Indo-US Nuclear Relations are varied. An attempt has been made here to review the available literature, which primarily looks at the policy perspectives. Legal issues in the available literature are also surveyed. The first part of the survey will look at the

15 Adopted unanimously by the Security Council on 6 June 1998

implementation issues and the second part will look into the historical context of the legal and policy issues relating to international nuclear law.

The United States actively promoted Nuclear Energy co-operation with India from mid-1950s, which included building nuclear power reactors, providing heavy water for the CIRUS research reactor, and above all allowing Indian scientists to study at U.S. nuclear laboratories. (CRS Report 2006).

Nuclear co-operation since 1956 came to be established by an express international agreement.(J.P Jain 1974). Moreover, later, at a time when Partial Test Ban Treaty was being adopted India concluded another Agreement with the US (123 Agreement of 1963). In this connection firstly, a study beginning from the domestic legal system of India and of the USA is relevant to find out as to how the legal systems of both the countries work and what consequences do they produce in the international legal system.

Under the Indian legal system, Executive has powers to enter into any treaty, agreement, or convention with any state or with any international organisation as per Article 253 of the Constitution, read with Entry10 and Entry 14 respectively and in India the law is as Shaw.J laid down in Maganbhai Ishwarbhai Patel v. Union of India[16] that our "Constitution did not make the power to enter into a treaty, whether in peace or in war, conditional on passing legislation".[17] Under Article-73 the executive power of the Union of India was co-extensive with the legislative power of Parliament, and the power to legislate in respect of treaties was conferred on Parliament by entries 10 and 14, List 1, Schedule 7 therefore, the Executive might incur obligations by entering into treaties which may be in the name of statement also as in the present case but if such obligation did not restrict the rights of citizens or others, or modify the laws of the state, no legislation was necessary; but if such obligation did affect such rights or modify such laws, legislation would be necessary[18] (Seervai :1991).

According to another leading scholar Indian Constitution has murky treaty provision, which should have received the serious attention by the Commission to review the working of the Constitution (Iyer: 2003).

[16] (1970) 3 SCC 400: (A.I.R., 1969, SC: 783)
[17] ibid
[18] Ibid.

Thus, the Treaty implementing power in India overrides the normal federal-state jurisdictional lines. According to another scholar, in the absence of such provisions, the Centre's capacity in the International field would have been greatly impaired, as it could not then pursue a strong and effective foreign policy (M.P.Jain-2003).

This gives an additional dimension to the Centre's power over external affairs, which are much broader than that existing in any other federation. Thus, it is not necessary to enact a law for implementing each and every treaty. (M.P.Jain-2003).

As regards US law is concerned, it needs to be understood and examined as to what extent can US executive say that some part of their law is binding on it and while some part is not (advisory) .This needs an examination under US legal and executive system with an examination of the US Constitution itself. An Expert Panel of American Bar Association said that:[19]

> The original intent of the framers of the American Constitution was to require the President either to sign or veto a bill presented by the Congress in its entirety.....The plain language of Art-1, S-7, clause-2 (presentment clause of the Constitution) compels this conclusion.....There is not even a hint that President could sign or veto a part of Bill and elect to enforce a law that differed from the one passed by Congress. President George Washington confirmed the clear understanding of the Bill signing clause when he declared that a bill must be approved in all its parts or rejected in toto.

In the present case, the legal issue is to see how India and US would implement July 2005 Joint Statement.

How far India could have salvaged its position before the 1963 Agreement with US under international law? As it should be noted that 1963 Agreement was 123 Agreement. This 123 Agreement (Tarapur Agreement) was unique in that it guaranteed supplies of enriched uranium fuel from the US for running the Tarapur reactors for their entire life. However, after 1978 (as a result of the passage of the Nuclear Non-Proliferation Act) US stopped supplying the fuel saying that its domestic legislation prevented it from doing so. How can an International Agreement's provisions requiring a perpetual implementation be

[19](George Bunn -As reported by the "Task Force on presidential signing statements and separation of powers doctrine" recommendation-2006)

overshadowed by a domestic legislation? However later the U.S. allowed France to supply the fuel. India's argument thus withered away that US must honour the Agreement (A.G. Noorani :1981,M.R Srinivasan:1989, Brahma Chellaney:1993, and also in Hindu Dec 27 2006).

The legal framework for Indo-US nuclear cooperation was provided by 1963 Agreement, although bilateral cooperation began in 1956 as a result of "Atoms for Peace" policy. (Chellaney: 1993).

After India's 1974 nuclear detonation this legal framework, however, came under a severe strain. U.S. legal interpretations of the agreement changed gradually as the International Non-Proliferation system was overhauled to incorporate a new stringent export regime based on the concept of Technology Denial. As India could have sought clarification from the US according to the VCLT[20] (Vienna Convention on Law of Treatie1969) which provides that, a party can not invoke the provisions of its domestic law as a justification for not honouring its commitments under a treaty (Chellaney :1993).

United States had publicly never said that the agreement does not have the force of bilateral treaty as defined by the Vienna Convention. But, privately, US officials claim that the agreement has less than the force of a Treaty, although not denying the fact that it is a binding international pact. (Brahma Chellaney in Personal Interview with US officials) However, an internal US document shows that the agreement is assumed by American officials to be a bilateral treaty. (William Young's brief for US Government on November 28, 1979).

Variety of legal arguments without going to the court or any international judicial mechanism were prepared by United States stemming from the Amendment to contract of sale of enriched uranium entered into on 26 November 1971, which, provided under paragraph 1(D) that:

[20] It is interesting to note that both India and the United States are not party to this convention nevertheless it has been held by the International Court of Justice as establishing customary law, for further description see e.g. the Namibia case, ICJ Reports, 1971pp. 16, 47; 49 ILR, pp.2,37 and Fisheries Jurisdiction case, ICJ Reports, 1973,pp 3,18; 55 ILR, pp. 183, 198 .

.... "India would comply with all applicable laws, regulations and ordinances of the US and of any state, territory or political subdivision"....

Based on these both the Countries remained engaged in the political debates with in their own political establishments until France took the American responsibility.

After conclusion of the 123 Agreement we are required to seek an Amendment of the London Club guidelines and enter into an agreement with the IAEA by signing the two Protocols (Bhonsle and et al: 2006).How far such a Club's guidelines can affect the operation of a civil nuclear material supply agreement. In other words, what is the status of NSG in international law as to affect the treaty making provision with respect to two states? The present International legal position of IAEA also needs to be considered, as India is also required to sign two protocols with it to enforce the Deal, irrespective of our past record that we continued to abide by our agreement with IAEA despite US non-compliance with 1963 Agreement. Furthermore, IAEA is also mentioned in the Article 81 of the VCLT-1969.

Next is the use of words "countries with advanced nuclear technology" and "India would ...assume the same responsibilities and practices and acquire the same benefits and advantages as other leading countries with advanced nuclear technology, such as the United States" in the joint statement of 18 July 2005. Whether does it confer a status at par with the USA or in any other terms lesser than that though, of course, US has expressly denied for giving India a NWS status. (White House Statement and also in the US India Peaceful atomic Energy Co-operation Act 2006) The current debate for entering into another "123 Agreement" is more focused on the compliance of above stated Joint Statement from Indian point of view (Hindu, Times of India).

C. OBJECTIVE OF THE STUDY:

On the basis of the literature available, an attempt shall be made to understand the basic nature of the operation and implementation of the Joint Statements and Agreements as are entered into and their efficacy under the present international law. The study will be limited to the examination of

emerging Nuclear Deal between India and the US in a historical and political context. This study will also develop an understanding of the basic framework of operation of international law *vis-à-vis* domestic laws of both states regarding the adoption in their domestic domain which shall limit itself to nuclear co-operation between these two states. Another issue that will heighten our understanding of the international law will be on the compatibility of the safeguard system outside IAEA system i.e. how far an international legal system between two states can make itself subject to IAEA system and how far a bilateral deal can make the IAEA system subject to itself. For this study, IAEA Statute and its Protocol will be studied to the extent necessary.

D. RESEARCH METHODOLOGY

The method in this work shall be analytical and descriptive apart from applying the Legal Methodology while dealing with the national cases decided by the Supreme Court of India and the Supreme Court of the United States and international cases decided by the International Court of Justice. Few leading scholars if need be will also be consulted on this subject. The study will be based on both the primary and secondary sources.

E. CHAPTERIZATION

The dissertation will contain five chapters including introduction and conclusion. First chapter shall be introductory.

The second chapter entitled "Indo-U.S. Nuclear Cooperation: An Overview" will deal with the United States co-operation with India since the beginning of the Atoms for Peace era till the present times, and will also include the US non-compliance of its 1963 Agreement.

The third chapter will analyze the present two Joint Statements and the issues raised therein, including their status in international law and shall also deal with the IAEA and NSG's position as regards the Agreement and the status of both these bodies in the International law. It will also deal with the

also deal with the issue of Nonproliferation vis-a-vis present Nuclear Deal. It will be entitled as "Nuclear Deal: The International Legal Issues".

The fourth chapter will focus on the domestic legal system of both the countries for entering and implementing the international agreements with an emphasis on the present deal. It will be entitled as "Implementation of the Deal: Domestic Legal Issues". The final chapter will contain the conclusions of this study.

Chapter II

Indo-U.S. Nuclear Cooperation: An Overview

Imagine the circumstances if the U.S. or other Nuclear-Weapon states were to say: We've been lying. We have no intention of ending our reliance on Nuclear-weapons. We will not fulfill our commitment under article VI of the NPT, but we will continue to expect NNWS to fulfill theirs of never acquiring Nuclear Weapons. It would be a toss-up between which reaction would come faster or in large measure-The beginning of nuclear weapons programme in a number of countries or a major breakdown in global political relations. What is certain is both will occur. [1]

India's need for the resumption of civil nuclear cooperation with the United States (U.S.) arose in the context of India's requirements for adequate and affordable energy supplies to sustain its accelerating economic growth and as recognition of its growing technological prowess. Before the new agreement for cooperation in this field began, there was a discussion between the Prime Minister Manmohan Singh and President Bush on the global energy scenario and long term implications of increasing pressure on hydrocarbon resources and rising oil prices. This energy concern led to the announcement in April 2005 of an Indo-U.S. Energy Dialogue that encompassed the entire spectrum of energy options ranging from oil and gas to coal, alternative fuels and civilian nuclear energy.

Through the initiation of a continuous dialogue to address the energy security concern on which depends the entire national life of the two countries, they sought to promote stable, efficient and practicable cost effective solutions for India's growing energy requirements. India has developed proven and wide-ranging technologies in the nuclear field including over the entire nuclear fuel cycle. It is recognized at the international plane that India has unique contribution to make to the international efforts for realizing the potential of nuclear fusion energy in the times to come and therefore India has become full partner in the International Thermonuclear Experimental Reactor project (ITER) that began in Europe last year. Before this challenging goal could be realized both India and the U.S. thought it better to

[1] Richard Butler, *Fatal Choice: Nuclear Weapons and the Illusion of Missile Defense* (Boulder Co: West View Press 2001, p.146

conclude an Agreement for cooperation in fission mode of energy production. This entire saga of nuclear cooperation emerged from the older days of nuclear energy cooperation. Before we begin to discuss on the entire history of India-US cooperation let us have a look on the question of Nuclear Energy cooperation.

A. Nuclear Energy Cooperation: U.S. Position

Cooperation in the nuclear field after realizing the destructive power of the Nuclear weapons was a gradual development. On the part of the U.S. this was declared as late as in 1953 when President Eisenhower is said to have heralded the beginning of the 'Atoms for Peace' era before the United Nations General Assembly. Before 1953 the U.S. policy on the nuclear energy cooperation in the words of William C. Bader (1968:103) was:

"All discussion within the U.S. on the issue of cooperation in the nuclear energy field was very sketchy one."

This means that efforts in the nuclear energy dimension were not steady and the policy followed by the U.S. administration was not uniform. Nevertheless, this period is said to be in political terms the period of "total denial" (Fischer 1996:135) of cooperation with any state. Before India and U.S. began to cooperate with each other in the peaceful uses of nuclear energy there was a debate going on in the international community as to the feasibility of such cooperation among States. After US had used its two devices on the two Japanese cities in the II World War, it became an imperative duty of the international community to ponder over not only the feasibility of the energy generated from the nucleus of a radioactive element but also the question found its linkage with horizontal and vertical dispensation of the nuclear information in the world.

In June 1946, Bernard Baruch presented to the UNGA the plan for nuclear disarmament which bears the name "Baruch Plan"[2] (Fisher 1996:135). The same year

[2] Under the Baruch Plan, proposed in mid-1946 by the United States, all nuclear resources were to be internationally owned and managed. Under this plan, the United States would give up its nuclear weapons program only after all other states had placed their nuclear programs under international control. Shyam Bhatia, *India's Nuclear Bomb* (Ghaziabad: Vikas, 1979), p. 43. Also see- Center

CHAPTER V

CONCLUSION

The present study attempts to look at the legal aspects of the Nuclear Deal which is currently being negotiated between the Governments of India and the United States. The study begins with a brief description of the evolution of India's nuclear programme. It is evident from the study that India's nuclear energy programme is not something that began in the last decade and has a history of its own. As a matter of fact, India entered in the nuclear age simultaneously with its independence. The strategic divisions of the Indian government have greatly recognized the significance of nuclear energy in the economic development of the country. No wonder, India has from the very beginning made it clear that the promotion of atomic energy is going to be an important national endeavour.

Over the years, India has made spectacular progress in possessing and developing the nuclear technology. At the first International Conference on Peaceful Uses of Atomic Energy, India made a firm declaration that "atomic energy is not merely an aid, it is an absolute necessity". While India has never relinquished its claim on nuclear energy, she is committed to its responsible use. The 18th July Statement is only acknowledging what is, by now, a well known fact, when it describes India as a "responsible State with advanced nuclear technology". At a time when the threat of proliferation of nuclear weapons compels every government to be cautious in dealings with nuclear technology because of security considerations and other wider ramifications, the current engagement between the United States and India on the nuclear question needs careful legal and policy scrutiny.

India has been engaged constructively with the United States since the 'Atoms for Peace' period. An understanding of that historical past is important in determining and devising strategies for the present and future. In this spirit, the study attempts to understand the complex history of past nuclear cooperation between India and the United States. The possible impact and its many linkages on the current Nuclear Deal are also examined. In pursuing that attempt, the 1963 Agreement for Atomic Energy Cooperation is discussed in the light of the circumstances in which it was concluded and the circumstances arising later after India's first nuclear detonation in 1974.

It is argued that in the present age of nuclear technology, nations large and small are leaving no stone unturned for their economic development. There is a

growing chorus in India that calls attention to the important role that nuclear technology can play in the economic development of the country. In order to develop as rapidly as the most developed nations of the world have, India also requires nuclear energy. Since all available non-renewable resources of energy will last to a limited period of time, India has to see its future in the generation of nuclear energy. Indigenous production of oil and natural gas is minimal compared to its requirement for consumption. It is therefore argued that there is no option other than to turn to "Nuclear Energy". India at present does not have nuclear fuel (i.e. Uranium, though Thorium reserves are ample) required to meet its requirements instantly. And, if, in the next ten years, the alternate sources of energy in the form of nuclear energy are not utilized or brought to the better possible way of their utilization, then, experts believe that, India will lag behind the major economies of the world.

Today, India is the fifth largest consumer of the world's energy and its requirement is going to double by 2015. In India, the capacity addition programme for all the sources of electricity is planned through Five-Year Plans and Annual Plans by the national Planning Commission. The nuclear power generation programme is administered under the Atomic Energy Commission. Development of nuclear power and related activities has been separately organized due to the special requirements and R&D support needed for the programme. Nuclear Power Corporation is responsible for design, construction, commissioning and operation of the nuclear power stations. It is supported by the different units of the Department for R&D, supply of fuel, heavy water, etc. Power generated from the nuclear power stations is sold to State Electricity Boards as per the power purchase agreements.

The generation of electrical energy from the nuclear fuel is fraught with the chances of the utilization of the nuclear fuel cycle for the destructive purposes of making the bombs. It has been discussed in the study as to how the idea for constructive purposes developed with the launching of "Atoms for peace" era in 1953.United Nations efforts to free the world of nuclear weapons never materialized. Although international community has had occasions to express its views on the existence of nuclear weapons, it has never been able to bring the big powers around the view that total disarmament and non-proliferation are the two

sides of the same coin. The result is that the big powers are only comfortable with the non proliferation agenda as it applies to other States. Article VI of the NPT provides precisely for achieving such objectives while allowing less than obligatory platitudes against themselves. The arbitrary boundary which this Treaty erects between the Nuclear Weapon States and Non-Nuclear Weapon States is in complete conformity with this agenda of the few states. It is no accident then that the acquisition of nuclear weapons are now being considered as legitimate national security goals by a number of States including North Korea, Iran and several others.

One of the prime objectives of the Nuclear Cooperation Agreement is to ensure reduction of India's carbon dioxide emissions and its dependence on oil. While India's Separation Plan Document mentions "centrality of civilian nuclear energy to the twin challenges of energy security and safeguarding the environment", the United States seeks to bring India into the "nonproliferation mainstream" and create jobs for the almost withering U.S. nuclear industry. These considerations have heightened the interest of both the States.

The18th July Statement includes the words "full civil nuclear energy cooperation". There is a perception that it was not drawn with full ambit of accuracy as civil nuclear technology carries diverse kinds of research and developmental activities. There is a widespread apprehension in India that it may not get cooperation from the United States in many of her nuclear research endeavours. That's why the issue has come up for discussion in both the countries and more so, after the passage of the Hyde Act. In relation to the extent and ambit of such 'full' cooperation we have to see what ultimately comes in the text of the 123 Agreement. The Prime Minister of India has already conveyed in the Joint Statement that "India would reciprocally agree that it would be ready to assume the same responsibilities and practices and acquire the same benefits and advantages as other leading countries with advanced nuclear technology, such as the United States". How the Indian government proposes to protect the country's national interests remain a moot point at this juncture, as the negotiations are yet to conclude with finality.

The debate on the nuclear deal has largely focused on differing issues in both the countries. While in the United States, the major focus was to seek certain guarantees from India through an international agreement. In India, the issue on the

U.S. had enacted its first Atomic Energy Act also known as McMahon Act, which relied on government control and secrecy in the nuclear sector to keep nuclear technology, materials, and know-how under U.S. control on the domestic front, the legislation nationalized all aspects of U.S. nuclear ventures from uranium mining to Nuclear fuel production to the innocuous production of isotopes for medical use. It shows that how U.S. had internationally outlawed its knowledge generated with international efforts in export of nuclear materials, technology and know-how. It can be shown by the fact that United Kingdom, the closest wartime ally of it in nuclear research was denied continued collaboration after the war concluded (Gardner 1994:38)

In brief, it can be said that the initial U.S. postwar period was a period of non-collaboration in the U.S technological sector. As mentioned above, the Baruch plan which was recommended by President Truman was an amended version of a report by Assistant Secretary of State Dean Acheson and Tennessee Valley Authority Chairman David Lilienthan and it essentially called for the internationalization of all nuclear activities.

According to the plan all but the smallest nuclear facilities worldwide would have fallen under the management, if not ownership, of an International Atomic Development Authority (IADA), which would also have authority to inspect and license nuclear activities and promote the development of nuclear power for peaceful purposes. Fundamental importance envisioned in the plan was the end of nuclear weapons development and production and the elimination of all atomic weapons stockpiles. The plan provided adequate powers to the UNSC by giving it the power to impose sanctions on the country violating it. Accordingly it could not be even vetoed under Article 27 of the U.N. Charter by any member of the Security Council (Potter 1983: 36).

Baruch plan could not make through. Former U.S.S.R. viewed it as a U.S. scheme to maintain U.S. nuclear dominance by freezing its position as the only nation capable of building an atomic bomb.[3] The Soviet Union was also wary of the plan's

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for Nonproliferation Studies, "Treaty on the Nonproliferation of Nuclear Weapons: History," NPT Tutorial, <http://cnsdl.miis.edu/npt/npt_3/history.htm>.

[3] During the debate on the Baruch Plan in the United Nations, India resisted the idea of international ownership of fissile ores such as uranium and thorium. The leader of the Indian delegation to the

enforcement provisions as it provided for "no veto" provision. U.S.S.R. also presented a counter proposal which required in the first place the complete destruction of all nuclear weapons by the U.S. before an International system could be envisioned which, according to Gardner was in the reverse order of the business envisioned in that plan (Gardner 1994:38)

Thus in the end Baruch Plan was dropped. It is even today a debatable question among the international Scholars why U.S. pursued the two mode divergent policies i.e. to preserve the U.S. monopoly as long as possible by enacting the McMahon Act and at the same time introducing the plan as mentioned. According to some international relations experts the Baruch Plan was a "propaganda effort" designed so as to be rejected by the U.S.S.R. while some scholars take Atomic Energy Act as an interim measure that would protect U.S. nuclear secrets until a viable international nuclear control regime based on the Baruch Plan could be worked out (Ian Smart 1985:76)

The most discernible light in the area of nuclear energy cooperation came forward from the United Nations General Assembly speech of the U.S. President Eisenhower. His speech delivered on the 8 December 1953 forms a major divide with the earlier period of non-cooperation. By that time the evidence of the failure of the U.S. policy was mounting. The U.S. refusal to allow the spread of nuclear technology and know-how codified in the 1946 Atomic Energy Act was serving as a serious blockade to its participation in the rapidly developing international nuclear market (Gardner 1994:39).

Atoms for Peace policy represented a compromise between the Baruch plan's promise of access to nuclear technology and in the 1946's Act rigours which sought to restrict such access. The prime objective of this policy was to facilitate the dissemination of nuclear energy for peaceful purposes to all interested nations in

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General Assembly, Ms. Vijaylakshmi Pandit, argued that such control would deprive India of an important economic asset in the future. In general, India supported the principle of ensuring that nuclear materials and capabilities would be used only for peaceful purposes, but resisted any measures that would allow some states to retain nuclear weapons while denying others the full freedom to use their resources as they see fit .See- Shyam Bhatia, India's Nuclear Bomb (Ghaziabad: Vikas, 1979)

return for their acceptance of safeguards against military use of fissile materials. Soon after this policy on the part of U.S. administration was launched U.S. concluded Nuclear Cooperation agreement with nearly forty Nations, world over. All of which agreed to allow U.S. Inspection to monitor technology provided by the U.S. These bilateral agreements thus undertaken paved the way for the early U.S dominance of International nuclear transactions. Between 1956 and 1963, Atoms for Peace provided research reactors training, and fissile materials to 26 Nations including 13 in the developing countries which included India as well (Mounfield 1991:41).

However, it is to be noted that no uranium enrichment or plutonium reprocessing plants were included in this programme.Eisenhower's Programme addressed to the United Nations also at the same time called for the creation of what is now most vigilant body the international Atomic Energy Agency (IAEA). This autonomous agency of the United Nations family, founded in the 1957 had the charged of assisting the dissemination of nuclear Energy about which a discussion shall be made in the next chapter.

Thus we see by 1960's several global developments after the creation of Agency were creating favourable conditions for completion of arms control and nonproliferation Agreements. When U.S.S.R, U.K, France had already gone nuclear several steps were taken to strengthen the nonproliferation regime in the 1960's. The limited Test Ban Treaty or popularly known as Partial Test Ban treaty (Treaty Banning Nuclear Weapon Tests In The Atmosphere, In Outer Space And Under Water) concluded in 1963 prohibited nuclear testing on land or in atmosphere. India was one of the first signatory states to the CTBT. It was a significant achievement in the history of arms control measures. It was more effective in stopping the spread of nuclear weapons to non-nuclear weapon states(horizontal Proliferation) than it was in slowing the growth of nuclear stockpiles in nuclear weapons states.(Gary T. Gardner, 1994:41).

However, the 1968 Nonproliferation treaty is the permanent landmark in the Non-proliferation regime. No other regime is more symbolic of non proliferation or has done more to institutionalize the norm of nonproliferation. Though India is not a party to this treaty on the ground that it creates NWSs and the NNWSs and

perpetuates a divide between the two yet, its efforts for the strengthening of the nonproliferation regime are commendable.

Several provisions of NPT remain contentious and controversial leading to misunderstanding among the States. According to the Treaty Nuclear Weapon States (NWS) i.e. those possessing Nuclear weapons before 1st January 1967(Article IX (3)) are bound to:

(1) Not to help NNWS acquire atomic weaponry

(2) To share Nuclear Technology for peaceful purposes with interested nations.

(3) To make a sincere effort to reduce the level of their nuclear stockpiles

(4) To require that their nuclear Exports to NNWS be safeguarded.

While on the other hand, NNWS agreed:

(1) Not to pursue to the acquisition or development of nuclear weapons

(2) To place safeguards on their nuclear exports to NNWS.

(3) To accept the safeguards (Full –Scope-Safeguards) on all their nuclear materials whether imported or indigenously produced

(4) To share the nuclear technology for peaceful purpose with interested Nations.

Many of the provisions of the treaty remain controversial to this date. Treaty was extended in 1995 to operate indefinitely. However it must not be forgotten that it is a backbone effort to controlling the Nuclear Proliferation to this date (Gardner 1994:41).

In the meantime Comprehensive Test Ban Treaty (CTBT) also came to the horizon to control the proliferation of Nuclear weapons. This Treaty was opened for signature on 24 September 1996, when it was signed by 71 States, including five of the eight then nuclear-capable states. According to Article I:

1. Each State Party undertakes not to carry out any nuclear weapons test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control.
2. Each State Party undertakes, furthermore, to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion.

Though many efforts have been made so far by the International community to effectuate the non proliferation regime there remains a lacunae on the part of superpower states. Even some countries are critical of the Indo-US deal itself.

On the basis of NPT Article VI, as the 1996 World Court Advisory Opinion unanimously stated, "There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control."[4]

According to Nabil Fahmy, the most important reasons for the failure of non-proliferation regime are most generic. They are as follows -

- The Nuclear disarmament efforts have essentially come to a grinding halt, and thus international interest in both non-proliferation and nuclear disarmament has diminished. Global non-proliferation efforts are not expected to gain traction and international support if at the same time nuclear disarmament is not actively pursued.
- More and more frequent are attempts to completely de-link disarmament and non-proliferation efforts, a mistake that can only hurt on both counts. This trend actually may encourage the States to go nuclear.
- Nuclear nonproliferation concerns are dealt with only when they become mature and consequently with a sense of urgency leading to 'problem management' rather than 'problem solving' approaches.
- Nuclear nonproliferation concerns and efforts have been governed by shifting standards and driven by political and occasional parochial domestic considerations, when in the past the only criteria was 'no more nuclear weapon states and the nuclear ones should disarm' (Fahmy 2006:83).

Thus, the question of cooperation in the field of nuclear is Energy entrenched deeper into the ambiguity of disarmament and the nonproliferation. The U.S. on the one hand clamours for the nonproliferation and on the other hand few states utilizing the ambiguity that exist in the present system leave no stone unturned to

[4] Legality of the threat or use of Nuclear weapons case, 35 ILM 809(1996)

get the nuclear capability for the destructive purposes North Korea is a recent example.

B. India and the Nonproliferation

India took part in all the initiatives towards the nonproliferation endeavours in the international community. India was one of the first countries to sign the Partial Test Ban Treaty (PTBT). India proclaimed that it "will take us towards disarmament and peace" (Mirchandani 1968: 240).

The 12th Pugwash Conference[5] on Science and World Affairs convened in Udaipur, India discussed "Current Problems of Disarmament and World Security." At this conference, Dr. Bhabha presented a paper entitled "The Implication of a Wider Dispersal of Military Power for World Security and the Problem of Safeguards" and this paper described the benefits of nuclear deterrence in the face of asymmetrical capabilities, noting in particular the advantage China enjoyed due to the size of its population. Dr. Bhabha suggested that if "any State is to be asked to renounce a possible dependence on nuclear weapons to redress the balance of power against a larger and more powerful State not having nuclear weapons, such as China, its security must be guaranteed by both the major nuclear powers." To keep countries such as India from developing nuclear weapons, Dr. Bhabha indicated that the impetus rested with the U.S. and the Soviet Union to provide security assurances or lead the way towards nuclear disarmament (Bhabha 1964:75-78).

As the discussions on the nonproliferation front before UN Disarmament Commission (UNDC) were going on, on May 4, 1965, the Indian delegate to the UNDC elucidated India's five requirements for acceptance of a Nuclear Non-Proliferation Treaty:

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[5] It was founded in 1957 by Joseph Rotblat and Bertrand Russell in Pugwash, Nova Scotia, Canada, following the release of the Russell-Einstein Manifesto in 1955 which was issued in London on July 9, 1955 by Bertrand Russell in the midst of the Cold War. It highlighted the dangers posed by nuclear weapons and called for world leaders to seek peaceful resolutions to international conflict. Pugwash was awarded the 1995 Nobel Peace Prize jointly with its leading spirit, the biophysicist Joseph Rotblat.

(1) Promise by nuclear powers to refrain from transferring nuclear weapons or technology to others; promise by nuclear powers to not use nuclear weapons against non-nuclear states;

(2) Guarantee from UN to protect States threatened by nuclear weapons states;

(3) "Tangible Progress" toward nuclear disarmament including a Test Ban treaty, halting production of weapons and means of delivery and cutting existing stockpiles; and

(4) Promise by non-nuclear States not to obtain or produce nuclear weapons. Indian recommendations juxtaposed with more minimalist US proposals came to shape the debate on the issue within the Committee (Perkovich 1999:103).

India in these requirements did not mention about its stance which later developed and formed the part of Indian foreign policy. The Indian spokesman made India's precise intention against nuclear weapons further clarified to the United Nations in 1965 before United Nations Disarmament Commission (UNDC) -

> We want not only the prevention of further proliferation but also the reversal of present proliferation.... It is no use telling countries, some of which may be even more advanced in nuclear technology than China that they should enter into a treaty which would stipulate that they must not acquire or produce these weapons. Again, it is now telling them that their security will be safeguarded by one or other of the existing nuclear powers. Such an assurance has to be really dependable. Moreover, nations are not interested in having another Hiroshima on their soil before an assurance of this nature could come into effect. Unless the nuclear powers and would-be nuclear powers undertake from now on not to produce any nuclear weapons or weapons delivery vehicles and, in addition, agree to reduce their existing stockpile of nuclear weapons there is no way of doing away with the proliferation that has already taken place or of preventing further proliferation (Bader 1968:103).

The Indian representative to the nonproliferation treaty negotiations in Geneva insisted on balanced obligations between nuclear weapons states and non-nuclear weapons states. This speech underlines the Indian shift from seeking nuclear guarantees to the desire for the elimination of nuclear weapons. (Perkovich 1999:115).

A heated debate took place in the Parliament upon China's third nuclear test of 9th May 1966. On the 10th May, members of Parliament called on for a change in the government's policy. Prime Minister Indira Gandhi intervened to calm the delegates by saying that the government is "building up its atomic power" and "increasing our know-how and other competence," while maintaining its adherence to its policy of peaceful uses of nuclear energy. The Minister of External Affairs announced that the Indian government knew that China would conduct more tests and that, while this new test should not change India's policy, the policy is under constant review. (Mirchandani 1968:45-46).

Debate among the Indian intelligentsia on the nuclear issue was getting intensified. A number of "prominent Indian citizens" addressed a joint statement to the Indian government against signing the Nuclear Non-Proliferation Treaty (NPT) as it is put forth by the U.S. and the Soviet Union. The signatories claimed that India has already compromised its sovereignty by allowing foreign inspections of Indian nuclear facilities by the 1963 Tarapore Agreement and, that this Nonproliferation Treaty would increase the constraints on India's options without increasing its security (Mirchandani1968:135-36).

India's lower house of Parliament (Lok Sabha) convened a debate on nuclear policy. Minister of External Affairs Chagla expressed the view that India should not sign the NPT as it stands because, in addition to failing to provide security for Non-Aligned states such as India, it would impede future development of peaceful uses of nuclear energy. The Secretaries Committee expressed its hope that the treaty would be improved and that the issue of protection of non-nuclear states would be clarified (George Perkovich 1999:135-136).

However, India's Final view to the NPT came at United Nations General Assembly. India's Defense Minister Swaran Singh announced that India will not sign the NPT because:

> Certain Non-nuclear countries could have produced Nuclear Weapons several years ago had they desired, but have refrained from doing so. It can scarcely be

> argued that this policy of restraint and self-discipline should result in their being deprived of the benefits of the development of peaceful nuclear technology while the Government of India continues to be in favour of the non-proliferation of nuclear weapons, it is equally strongly in favour of the proliferation of nuclear technology for peaceful purposes, as an essential means by which the developing countries can benefit from the best advances of science an technology in this field (Mirchandani, 1968: 149).

The Indian objections to the NPT were:[6]

(1) The treaty did not ensure the nonproliferation of nuclear weapons but only stopped the dissemination of weapons to non-nuclear weapon States without imposing any curves on the continued manufactures, stockpiling and sophisticating nuclear weapon by the existing nuclear weapon states.

(2) The treaty did not do away with the special status of superiority associated with power and prestige conferred on those powers which possessed nuclear weapons.

(3) The treaty did not provide for a balance of the obligations and responsibilities between the nuclear-weapons-states and non-nuclear- weapons States. While all the obligations were imposed on the non-nuclear-weapon states, the nuclear weapon states had not accepted any

(4) The treaty did not constitute a step by step approach towards the nuclear disarmament.

(5) The treaty did not prohibit one nuclear-weapon-state from assisting another nuclear weapon state by providing technical aid.

(6) The long period of a quarter of a century provided in Article X of the treaty would appear to endorse and legitimize the present state of affairs and legalize, if not encourage, an unrestricted vertical proliferation by the present nuclear weapon powers.

(7) Article VI did not create a juridical obligation in regard to the cessation of nuclear arms race at an early date.

(8) The treaty imparted a false sense of security to the world.

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[6] Listed in a statement made by the Indian Ambassador Mohammed Azim Hussain at the 57th meeting of the First Committee of the United Nations[6] (FCUN) on 14th May 1968. See Subrahmanyam 1974. It is further to be mentioned that much of the work of UNGA is conducted by Six of its Committees. While rest of the five committees are concerned with other international issues, the First Committee is concerned with disarmament issues, outer space, and security issues. Martin Griffiths 2004 P 317, and see also UN website- www.un.org

(9) The treaty was discriminatory in regard to the peaceful benefits of nuclear explosions.

(10) The treaty was discriminatory in regard to the safeguards and controls which were all imposed on the non-nuclear-weapon states while none whatsoever were imposed on the nuclear weapon states.

(11) The security assurances to the non-nuclear-weapon states could not be a quid pro quo for the acceptance of a treaty. This must be obligatory for a nuclear weapon state (Subrahmanyam 1974: 259-260).

This is how India's contentions as a country supporting "Complete Nuclear Disarmament" developed. India's participation in negotiations to the NPT had led the insertion of Article VI in the NPT which talks of the complete nuclear disarmament. Thus, finally the Indian Parliament vetoed Indian signature of the recently completed Nuclear Non-Proliferation Treaty (Perkovich1999:125).Since, those times India's stand on the nonproliferation remains the same. Since independence, pursuit of nuclear disarmament has been an important objective of India's foreign policy.

However, Following India's nuclear explosion of 1974, the US constituted a "Nuclear Suppliers Group" (NSG) to mount pressure on India and others, to make nuclear cooperation contingent on the recipient country accepting the provisions of the Non-Proliferation Treaty i.e. full scope safeguards on all nuclear installations.

India was of the opinion that the existence of nuclear weapons poses a threat to international peace and security. Creating a nuclear weapon free world by eliminating all nuclear weapons through a multilaterally negotiated treaty which is effective and verifiable would enhance global security and the security of every man, woman and child. In pursuit of nuclear disarmament, India has taken many initiatives. India was among the first countries to call for a ban on nuclear weapon testing, as early as 1954 (Desai 2000: 160). Such a ban would have prevented the nuclear arms race which the world has witnessed in recent decades. During this period, the UN General Assembly adopted nearly hundred resolutions on this, highlighting the concern of the world community on this issue.

During the negotiations on a CTBT in the Conference on Disarmament in Geneva, India participated actively and constructively, putting forward its proposals in keeping with its long-standing position. The CTBT had always been visualized as the first definitive and irreversible step along the road to Nuclear disarmament. When the negotiations began India thought somewhat optimistically, that, the NWSs were ready to take such a first step on the road to nuclear disarmament but afterwards India realized that "NWSs show no interest in giving up their nuclear hegemony" (Desai 2000:157).

The negotiations on CTBT ended without consensus because the text does not reflect the aspirations of the vast majority of countries for a nuclear weapon free world. (Desai 2000:157). It is a matter of regret that the text, as has finally emerged, does not do justice to the negotiating mandate. It is not a comprehensive ban but merely a ban on nuclear explosive testing. It also lacks a definitive commitment to nuclear disarmament. India remains committed to pursuing global, nuclear disarmament with a view to creating a nuclear weapon free world and a non-violent world order.

As Desai points out: (P: 161)

> With a declared NWS to our north, another undeclared NWS to our west and vessels carrying nuclear weapons sailing in the Indian Ocean, India can not afford to give up her nuclear option or accept any restraint on it unless there is genuine acceptance of the goal of nuclear disarmament."

According to India, CTBT must reflect a commitment to achieving elimination of all nuclear weapons within a time bound framework. This has been India's stand on the nonproliferation front.[7] As we know that India did not sign the CTBT but at the same time India never wanted to be a spoiler thereof. and India's stand is quite distinct from the U.S. principle of "Nuclear proliferation is inevitable; at best it can be managed, not prevented" (Potter 2005:343).Before we get into the issue of CTBT which itself is as comprehensive as the treaty itself and can not form the part of this smaller work it would be worthwhile to have a look on the India's Indigenous nuclear programme.

[7] See also India's Nuclear Doctrine

C. India's Indigenous Programme:

Indian Initiative in the nuclear research started prior to independence. During the World War period a landmark leap in India's research and development (R&D) took place when the British Government created Council for Scientific and Industrial Research (CSIR) to carry out the science related activities of Indian government to support the war effort (Venkataraman1994:144). Thereafter, as the Quit India Movement had started and the R& D work could not progress with a faster pace. In 1942 Dr. Bhabha wrote a grant request to the Sir Dorab Tata Trust to seek funding for the creation of an Indian institute to conduct fundamental research in the nuclear field (Sreekantan, and et al 1985:958). The trustees agreed to fund the Tata Institute of Fundamental Research with a budget of 80,000 rupees. The Tata Trust decided that responsibility for financing and managing the institute should be balanced between Bombay University and the local government (Perkovich, 1999:16).Thus June 1, 1945 became an important day in India's nuclear History when Dr Bhabha became Director of TIFR which began its operations in Bangalore. However, In the December month of the same year Bhabha decided to move TIFR to Bombay Where he received for it 25000 Rupees from government of Bombay, 10000 Rupees from the Government of India and 45000 rupees from the Tata Trust (Venkataraman 1994:114).

On 26 June 1946, Leader of the Interim Government Cabinet, Jawaharlal Nehru, delivered a speech in Bombay in which he discussed about prevention of the use of atomic bombs. He mentioned among other things that use of atomic bombs by US were not warranted and stated that India will develop its scientific researches and hope to use the atomic force for constructive purposes. During the course of his speech he also pointed that if India is threatened, she will inevitably try to defend herself by all means at her disposal (Norman 1965: 264).

Thus, as we see India's indigenous efforts in nuclear science and technology were established remarkably early. The Government of India passed the Atomic Energy Act, on 15 April 1948, leading to the establishment of the Indian Atomic Energy Commission (AEC) within a year after India gained independence. At that time Prime Minister Pandit Jawaharlal Nehru declared:

"We must develop this atomic energy quite apart from war - indeed I think we must develop it for the purpose of using it for peaceful purposes. ... Of course, if we are compelled as a nation to use it for other purposes, possibly no pious sentiments of any of us will stop the nation from using it that way." (Constituent Assembly of India Debates (Legislative Debates) 1948, 2d session., vol. 5, April 6, 1948, pp. 3315, 3328, 3333-340)

This note of ambivalence in Nehru's[8] speech foreshadowed his policies on nuclear research for the next decade. Nehru took a prominent role in international politics, founding the Non-Aligned Movement, and advocating nuclear disarmament. However, he refused to foreclose India's nuclear option while other nations maintained nuclear arsenals and supported programs designed to bolster India's weapons potential.[9]

After the passage of Indian Atomic Energy Act, in the same year, Dr. H. Bhabha wrote a note entitled *'Organization of Atomic Research in India'* to Prime Minister Nehru, in which he expressed his view that "the development of atomic energy should be entrusted to a very small and high powered body composed of say, three people with executive power, and answerable directly to the Prime Minister without any intervening link. For brevity, this body may be referred to as the Atomic Energy Commission." Dr. H. Bhabha opinioned that the existing Board of Research on Atomic Energy is not an appropriate body to manage such matters because it must

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[8] While introducing the Bill for the said Act in the Constituent Assembly upon a Member's (S.V. Krishnamurthy Rao) criticism that "secrecy in the UK is restricted only for defense purposes," Why should it be for Atomic Energy? Nehru responded, "I do not know how you are to distinguish between the defense and atomic energy purposes." Nehru further stated, "If we are to remain abreast in the world as a nation which keeps ahead of things, we must develop this atomic energy quite apart from war—indeed I think we must develop it for the purpose of using it for peaceful purposes....Of course, if we are compelled as a nation to use it for other purposes, possibly no pious sentiments of any of us will stop the nation from using it that way. But I do hope that our outlook in regard to this atomic energy is going to be a peaceful one for the development of human life and happiness and not one of war and hatred." For further details see- Constituent Assembly of India *Legislative Debates* 2d session., vol. 5 1948:18)

[9] In the year same the Indian Government formed the Atomic Energy Research Committee with Dr. H. Bhabha as its Chairman. This committee functioned as part of the Council for Scientific and Industrial Research (CSIR) and focuses on promoting education in nuclear physics in Indian colleges and universities. Dr. H. Bhabha used his position with this organization to consolidate his political position and advise Interim Government Cabinet leader Jawaharlal Nehru more closely on matters related to atomic energy. (G.Venkataraman, 1994:145).

report to the 28-member Governing Body of the Council for Scientific and Industrial Research (CSIR), which would compromise its ability to maintain confidentiality. In addition, Dr. H. Bhabha recommended that the Board of Research on Atomic Energy be abolished when the AEC is formed. He then requested approximately 10 million rupees for the Commission to use over the next four years, permission from the Prime Minister to continue negotiations with Britain, France, and Norway under complete secrecy, and permission to prepare bilateral agreements with each country, which would be submitted to the Indian government upon completion (G. Venkataraman 1994: 145-146; Itty Abraham 1998: 60).

In the year 1952, Prime Minister Nehru unveiled a four-year plan to begin developing India's nuclear infrastructure. His plans covered the survey for atomic materials, processing of monazite to obtain thorium and the application of atomic energy in medicine and biology. Dr. Bhabha began to "discreetly" seek technical information on reactor theory, design, and technology from the U.S., Canada, and the United Kingdom, while also negotiating the sale or trade of raw materials such as monazite and beryl ore used in the nuclear cycle.[10]

Later, on August 3, 1954 Department of atomic Energy(DAE) was established (India, 2007: 750) and on Dec 12, Dr. H. Bhabha addressed a joint session of Parliament and expressed concern that at the current rate of energy consumption, the world's existing power sources are likely to run out within the next 350 years. He proposed that tapping nuclear fission would alleviate this problem and assure the world sufficient power supplies for centuries (Shyam Bhatia 1979: 95).

The Department of Atomic Energy has been pursuing the three stages Nuclear Programme. The First stage comprised setting up of pressurized heavy water Reactor and associated fuel cycle facilities. PHWRs use natural uranium as fuel and heavy

[10] Beryl ore is the source for beryllium, which was considered vital for British and US nuclear weapons at that time (ShyamBhatia1979:78, 79).

water as moderator[11] and coolant[12]. The second stage envisaged setting up of Fast Breeder Reactors (FBRs) backed by reprocessing plants and plutonium based fuel fabrication plants. Here plutonium is produced by irradiation of uranium- 238[13]. The third stage will be based on the thorium-uranium-233 cycle. Uranium-233 is produced from the irradiation of thorium (India 2007:750).

Apart from it the Nuclear Power Corporation of India Ltd. (NPCIL) a public sector undertaking of the DAE, is responsible for the design, construction and operation of nuclear power reactors. The company was operating by the end of 2006 16 reactors (2 BWR and 14 PHWR) with the total capacity of 3900 MWe. NPCIL is also building 2 Light Water Reactors and 4 PHWRs that will increase the installed nuclear capacity to 6780 MWe by the year 2008 (India 2007:750).

D. Indo-US Nuclear Cooperation Agreement, 1963

After Indo-China war of 1962 and in accordance with the Atoms for Peace Programme India entered into a "123 Agreement" with the U.S. although bilateral cooperation began in the mid-50's after the Eisenhower administration launched its Atoms for Peace Policy. This Agreement titled as "Agreement of Cooperation between the Government of United States of America and the Government of India Concerning the Civil Uses of Atomic Energy", entered into force on 25th October 1963 (hereinafter referred to as the 1963 Agreement). The conclusion of this Agreement was in such a period when the international community headed by the US was deliberating on the establishment of a non-proliferation regime. The intention behind the U.S.'s entering into such an Agreement was to persuade India to be a party to the IAEA safeguards apart from ensuring the bilateral cooperation amidst the growing cold war scenario.

[11] Moderator is a substance which is used to slow down the speed of fast moving neutron in the nuclear reactor, which thereby increases the efficiency of their capture to bring about a fission reaction. It generally used to be graphite, a carbon ore or heavy water (Deuterium oxide).

[12] The coolant used in the reactors are liquid sodium metal, it is used to carry the heat generated in the reactor and controls the temperature.

[13] Uranium exists generally in three isotopes (isotope is a substance having same atomic number but different atomic mass) viz. Uranium 233, Uranium 235 & Uranium 238.

This agreement was not carried on in its entirety and lapsed in the year 1993 and this is what beacons us to enter in yet another one such agreement cautiously. The legal issues arising in this Agreement will be discussed soon after we reflect upon this Agreement (As shown in the Annexure I).

Though, before this in the early Atoms for Peace time we had entered in a contractual agreement with US in 1956 which was for a period of three months for the supply of heavy water and was duly complied with by the U.S. government (As shown in the Appendix A), the 1963 Agreement was the first such agreement that India had entered with the U.S. in relation to civil uses of nuclear energy. The US had under this agreement agreed to supply uranium ore and the technology related there with for the Tarapur nuclear power plant. After India's 1974 nuclear detonation this legal framework, however came under a severe strain. U.S. legal interpretations of the Agreement changed gradually as international non-proliferation system was overhauled to incorporate a new stringent exports regime based on the concept of technology denial under their domestic legislation (Non Proliferation Act, 1978).

E. Salient Features of the 1963 Agreement

The agreement stipulated that the US would sell "all requirements of the Government of India for enriched uranium" for the two nuclear power reactors. It also specified that when any spent fuel requires reprocessing, "such reprocessing may be performed in Indian facilities upon a joint determination by the parties" (India and the US). Such "joint determination"(Article II E) was required only for confirmation that the facilities in which the spent fuel was being reprocessed could be safeguarded by the IAEA. Under the agreement, which in international law had the sanctity of a treaty, the US pledged to supply enriched uranium for the power until 1993 as per the article X of the Agreement (Annexure I).

According to the terms of this agreement, the U.S. would supply two 200MW reactors, to be housed in one building at Tarapur. In exchange, India agreed to only use enriched uranium fuel provided by the U.S. (Article II A) and to allow the International Atomic Energy Agency (IAEA) to verify that the fuel at this facility is

not diverted from peaceful uses. The U.S. further stipulated that any subsequent separation of plutonium during spent fuel reprocessing must be approved by the US government. The agreement clearly spells out that any material received by India must not be used "for atomic weapons or for research on or development of atomic weapons or for any other military purpose." To finance the project, the U.S. offered $80 million credit at 0.75 percent interest over 40 years (Brahma Chellaney 1993: 26).

Some of the salient features of this Agreement are:

(1) The U.S. was required to sell India all the enriched Uranium required for Tarapur during the thirty year term of the agreement with the Uranium to be made available in accordance with the terms, conditions and delivery schedules set forth in subsequent contract between the two parties (Article II A).

(2) India had to use the fuel only of American–origin fuel at Tarapur (Article II A).

(3) Parties to this Agreement had to review the design of the Tarapur Atomic power station and might further review any significant modification in design for the sole purpose of determining that the arrangements provided in the Agreement could be effectively applied. Parties had option to review the design of other facilities as well pursuant to the fuel provided for Tarapur atomic power station (VI B).

(4) The quantity of enriched uranium sold to and held by India at any time is not to be more than that necessary for the full loading of the reactors plus such additional quantity as, in the option of the parties, is necessary to permit the efficient and continuous operation of the Station (ibid).

(5) Tarapur's spent fuel can be reprocessed in India only upon a joint determination by the U.S. and India that the safeguards provisions of the Agreement for cooperation can be effectively applied to the plutonium extraction activity (Article II, D).

(6) The U.S. will have the first option to buy the Tarapur spent fuel which is in excess of the amount needed by India in its programme for the peaceful uses of nuclear energy (Article II F).

(7) India pledged that U.S. supplied nuclear equipment and materials will not be used for nuclear weapons or any other military purpose and will not be transferred outside the country without American approval (Article VII A.1).

(8) IAEA safeguards shall be applied to US supply equipment, material, uranium fuel as well as burned up fuel (Article VI).

The enactment of a domestic legislation entitled Nonproliferation Act, 1978 changed the mutual cooperation rules with all the countries in that it required the IAEA full scope safeguards on all the nuclear facilities by introducing a complex web of prohibitions, inducements and controls (Paul F. Power 1979: 581). It must be mentioned here that all other nuclear cooperation agreements that U.S. had entered were applicable to all programmes that a country conducted, while for India it was related only to the Tarapur power plant (Article IX (b) of the 1963 Agreement).

U.S. later had to persuade France to fulfill its obligations under the 1963 Agreement by facilitating the signing in of an Agreement of France with India.[14] Because of the growing acrimony between India and the U.S. numerous politico-legal interpretations emerged as result of U.S. non-compliance[15] which was the result of India going for PNE in 1974.

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[14] As shown in Annexure II.

[15] Article 27 of the 1969 Vienna Convention on the Law of Treaties (VCLT) states that a party may not invoke the provisions of its domestic law as a justification for not honouring its commitments under a treaty. Article 27 of the VCLT is subject to Article 46 which states that (1) 'States may not invoke the fact that its consent to be bound by a treaty has been expressed in violation of a provision of its internal law regarding competence to conclude treaties as invalidating its consent unless that violation was manifest and concerned a rule of its internal law of fundamental importance.' According to Article 27 (2) 'A violation is manifest if it would be objectively evident to any States conducting itself in the matter in accordance with normal practice and in good faith.' Although India had the *locus standi* to question the US non-compliance of the Agreement it did not proceed against the U.S. in the International Court of Justice (ICJ).

U.S. non-compliance emanated primarily because of India's PNE detonation test but in order to justify its non-compliance U.S domestically had prepared legal arguments on the basis of 1971 Amendment to the contract of sale of 1966 which was entered into by both the countries pursuant to the 1963 Agreement for cooperation.[16]

United States had never publicly said that the agreement does not have the force of bilateral treaty as defined by the Vienna Convention. But, privately, US officials claim that the agreement has less than the force of a Treaty, although not denying the fact that it is a binding international pact.[17] However, an internal US document shows that the agreement is assumed by American officials to be a bilateral treaty (William Young's brief for US Government on November 28, 1979).

Variety of arguments having their basis in the 1971 Amendment[18] to the contractual agreement of 1966 without going to the court or any international judicial forum were prepared by United States. Stemming from it was a provision under Article 1(D) which said that India as a purchaser:

> would comply with all applicable laws, regulations and ordinances of the US and of any state, territory or political subdivision in connection with the material delivered to purchaser pursuant to article III A, or pursuant to article VII

This 1971 Amendment as aforesaid was pursuant to Article II of the 1963 Act, which in any case was subservient to the 1963 Agreement. Based on it both the countries remained engaged in the political debates with in their own political establishments until France took the American responsibility.

Thus according to U.S. interpretations, the 1966 contract and the amendment thereof were given more weight than the 1963 agreement. It conveniently overlooks the fact that the agreement for cooperation explicitly governs the fuel supply contract

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[16] Article II of the 1963 Agreement contained that "the enriched uranium, which shall contain no more than twenty per cent (20 per cent) U-235, will be made available in accordance with the terms conditions and delivery schedules set forth in a contract to be made between the Parties"

[17] Brahma Chellaney in Personal Interview with US officials, Brahma Chellaney, 1993.

[18] The Amendment to contract of sale of enriched uranium entered into on 26 November 1971 provided in Brahma Chellaney, 1993.

and, as a matter of law the Agreement's basic obligations and rights can not be bargained away by a subservient commercial contract (Chellaney 1993:176).

The 1963 Agreement for cooperation did specifically mention that fuel would be sold "in accordance with terms, conditions and delivery schedules set forth"[19] in commercial contract. At the same time that contractual Agreement in the crystal words provided that "In the event of incompatibility between this contract and the Agreement for cooperation, the latter shall govern"[20].

Thus, the American argument did not carry any basis for itself.1971 Amendment was a routine change in commercial contract to meet the demands of new law requiring India to take title to the fuel while still in the U.S. rather than at the port of loading as had been the case in 1966.The amendment was in fact made under the provisions of contract of 1966 which stipulated that in case of domestic law change, the U.S. and India would consult with each other to determine the modifications, if any so required in the contract, but nothing contained in the article shall affect the obligation of the U.S. to sell fuel to India and of India to buy fuel exclusively from the U.S.[21]

Despite this legal position, According to U.S. interpretation, India was lawfully bound to open its entire nuclear programme to outside inspection of IAEA after the U.S. Nonproliferation Act required it to do. United States according to their domestic interpretation was thus an injured party.

Congressional Research Service (CRS) of the American Law division stated that "India may be the party in actual or potential breach of the agreement and in ordinary circumstances can not walk away from the bargain previously stuck". U.S. according to CRS report would continue to regard the existing contract and the

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[19] See Annexure I under Article II

[20] Article XV of the 1966 Contract of Sale.

[21] Article XI of the fuel supply contract of 1966, done at New Delhi on 17 may 1965.

agreement as effective. U.S. would on its part thus pursue India to abide by its 1978 Act (Chellaney: 1993).

Apart from this the following set of issues according to Chellaney may be examined as the legal issues arising as a result of U.S. noncompliance and as a result of U.S. enactment of Nonproliferation Act.

(1) Whether the act of US in transferring its basic obligations to a third State (France) and also claiming to retain the rights under the 1963 agreement is justified?

(2) Whether the U.S. had prior consent rights over Indian reprocessing of American-origin and French-origin spent fuel?

(3) Could the U.S. or France claim their rights in perpetuity?

Each of these issues now shall be discussed in the greater detail.

As regards the first issue the agreement for cooperation explicitly ties the rights of both the parties to their obligations. In the compromise settlement of 1982 India had waived its right to have the U.S. supply of the Uranium fuel and on the same footing U.S. waived its right to require India to use only American fuel at Tarapur. The issue of law that arises is whether the Agreement signed by India with France subsequently constitutes the novation of the 1963 Agreement or did it merely delegate the obligation of the U.S. to the France.[22]

The U.S. claimed that the Indo-France Agreement has changed a little. Administration told the Congress that it did not view the U.S. India exchange of notes as amending the U.S-India Agreement of 1963 for cooperation in the nuclear field nor according to the administration it made a new Agreement. According to the

[22] Indo French Agreement on 1982, 26th November 1982. See Annexure II..

administration Agreement entered into in 1963 shall remain in effect in all other respects and need not be amended.[23]

However, some in the Congress viewed the compromise arrangement as a backdoor entry[24] (Donnelly and Miller 1993:6). The brevity of the US Indian exchange of diplomatic notes and Indo French Exchange of note has left room for legal conflict over rights and obligations. If the new arrangement is a novation in law, the US cannot retain the rights that are tied to its obligations under the Agreement for cooperation. But if the US is specifically the delegor and the France is the delegee in the new arrangement, the US Government would retain its right (Chellaney 1993: 180).

In this matter according to Chellaney the legal position is further complicated because of the following issues:

(1) The diplomatic notes exchanged agreed to waive the duty of the other party; neither country says it has agreed to allow the other side to delegate its duty to an outside party. Further, in the French India Agreement France stated that it has agreed to supply fuel 'in lieu' of the US rather than as a delegee of US (Annexure II).

(2) the US could claim to retain its right only if the Contract of supply entered between India and US would mention that France was supplying the materials for US (as a delegee) but all the rights of the US over India in terms of the 1963 Agreement (1966 Contract) were extinguished by the formation of a different contract with new conditions despite the fact that France agreed to supply materials in lieu of US in the Indo French Agreement of 26th November 1982.

On the second issue if we agree that the U.S. does retain its rights under the 1963 agreement, it would mean that, basically, it controls the right to approve reprocessing, to maintain safeguards, and to insist upon peaceful use of nuclear equipment and material. But how do those rights square with the 1980 U.S.

[23] Statement by Assistant Secretary of State for Near Eastern and South Asian Affairs, July 22, 1982 Washington post.

[24] Warren H. Donnelly and Neille L. Miller: *Nuclear Exports: Termination of U.S. Nuclear Cooperation with India*, CRS brief No.IB81087.Archived –June,1983 (Washington D.C.: Library of Congress) as cited by Brahma Chellaney.

suspension of the 1971 trilateral safeguards accord in favour the IAEA and India bilateral safeguards agreement. The bilateral safeguard Agreement transfers rights under Article VI of the Agreement for Cooperation to the IAEA (Chellaney 1993: 181).

The approval rights of the U.S on reprocessing are given under Article II E of the 1963 agreement in this way: "It is agreed that when special nuclear material utilized in the Tarapur Atomic Power Station requires reprocessing, such reprocessing may be performed in Indian facilities upon a joint determination of the Parties that the provisions of article VI of this Agreement may be effectively applied, or in such other facilities as may be mutually agreed."[25]

Chellaney proposes to ask- Does the U.S.' transfer to the IAEA of its safeguards rights under Article VI make inoperative its right to a joint determination? And even if it maintains the right to a joint determination, does that right amount to a blanket veto power to block Indian reprocessing, as Washington has claimed? Also, can the U.S. lawfully refuse to participate in a joint determination with India, as it has consistently done so?

As per the U.S. Government statement issued after the 1982 compromise settlement was announced, "It is clear that there must be a joint determination and the U.S. has not agreed to such a determination or delegated the authority to agree to such a determination. No reprocessing of Tarapur spent fuel in India may occur without U.S. agreement, which has not been given."[26] The U.S. had also made it known that it intends to indefinitely and retain a veto over what India does with the irradiated fuel. This veto power, according to the American government, covers not just the U.S. derived spent fuel but also the French-origin fuel in India because it claims France is a delegee in the new supply agreement (Chellaney 1993: 182).

There is no explanation provided for by the U.S on account of which it can claim a blanket legal right to block Indian reprocessing, or why it has never consented to a joint determination of the safeguard ability of Power Reactor Fuel Reprocessing (PREFRE) despite having stamped its seal of approval on the facility's design in

[25] Article II E of the 1963 Agreement.
[26] Assistant Secretary of State's Statement on July 29, 1982 Washington post.

1968. India's position has been that it has a right to reprocess the spent fuel 'without further consultation and that the U.S. claim of a veto right "makes no difference" to it. India owns the spent fuel and it can reprocess it at any time at the safeguarded PREFRE facility. India has sought a joint determination only 'because of our interest in maintaining good relations with the U.S.," although "it is not necessary from a legal point of view." However, because of obvious foreign policy considerations, India has refrained from putting into practice what its lawful right to reprocess (Chellaney 1993: 183).

Legal position of India is strengthened by the provisions of the 1963 agreement which permits it to recycle plutonium and uranium recovered from the spent fuel as reactor fuel for Tarapur and also for use "in its programme for the peaceful uses of atomic energy." The commercial recycle of the used fuel was thus envisaged by the agreement, and the U.S. can claim no lawful discretionary power to hold up reprocessing. Indeed, by having refused to permit reprocessing, the U.S. may have made itself vulnerable to possible legal action for recovery of the costs of spent fuel storage as well as damages for denying Tarapur reprocessed fissile material fuel (Chellaney 1993: 183)

In relation to the third issue of claiming rights in perpetuity with respect to US and France, India stated that the US had not mentioned any thing about the continuance of their right over the reactors after the expiry of the period when the Agreement was in force other than mere discussions during 1981.[27] Further, as per Article 42 (2) of the VCLT 1969 a treaty terminates upon the application of the provisions of the treaty and Article X of the 1963 Agreement provides for its termination 30 years after its entry into force in 1993 and hence neither US nor France can claim any rights over the nuclear supplies provided to India as those rights and obligations "terminate automatically" with the expiry of the agreement. Likewise US cannot compel India to comply with the IAEA safeguards because they were entered into as a part of the 1963 Agreement in 1971. As per Article VIII C., the survival of

[27] See for example, Indian Parliament, 'Debate on No-confidence motion; prime Minister's speech of 17 August 1982' (New Delhi:PIB). It is a matter of surprise that pertaining to present Nuclear Deal also a statement by Prime-Minister Manmohan Singh was delivered on 17 August 2006

the 1963 Agreement is dependant upon the subject matter of entering into tri-lateral accord which includes IAEA as the third party.

Conclusion

Nuclear cooperation between India and the US began in 1963 with the conclusion of the Agreement. The obligations under the Agreement however, went in abeyance because of the international political situation. Although the political aspect of the international situation does not form a major part of our study, the current Chapter has given considerable attention to some aspects of it, especially as it affected the interplay of legal obligations and normative standards.

It is generally considered that India was inclined towards the Soviet Union more than the U.S. during the cold war. It should however be remembered that India was one of the founder members of the Non Alignment Movement in 1961 and it is because of India's expressed neutrality towards the cold war camps that U.S. agreed to enter into nuclear cooperation. Though in the beginning years of nuclear adventures, U.S. was reluctant to share the information pertaining to its nuclear technology it was only after Eisenhower's Atoms for Peace Policy (1953) that U.S. began cooperation in the nuclear field. In addition to the above, U.S. was also interested to promote the non-proliferation regime.

The Indian position on the nuclear arena entered with positive aspect of the utilization of nuclear energy in its developmental process and it continued its support not only for the non-proliferation of the nuclear weapon technology but at the same time India strongly recommended and supported for the peaceful uses of nuclear energy. It also wanted the utilization of the nuclear energy for the peaceful purposes which as seen in the Chapter were tried to quell by U.S. However, India's nuclear advancement forced U.S. to cooperate with India with a view to expand the nonproliferation network but soon after 1974 peaceful nuclear explosion all accords were dismantled.

The experience of nuclear cooperation and the hurdles that it faced in course of time due to changed political circumstances hold important lessons as India and the U.S. are engaged in further renewing their levels of engagement in the field. It is important that both states work upon the areas indicated in this study with a view to reduce and eliminate potential hurdles that may hinder the smooth functioning of the arrangement that they seek to agree upon.

Chapter III

NUCLEAR DEAL: THE INTERNATIONAL LEGAL ISSUES

A. Introduction:

The discussion for the current nuclear deal began with the finalization and adoption of the two Joint Statements by India and the U.S. On the basis of the Joint Statements, the International Agreement for the cooperation in the Civilian Uses of the Atomic Energy is to be negotiated. The first thing that will form part of this study will be the status of 18 July 2005 Joint Statement,[1] the 2 March 2006 Joint Statement[2] and India's Separation Plan[3] of Nuclear Reactors under international law. In the discussion of the two Joint Statements the issues that have been incorporated in the domestic U.S. legislation entitled as United States India Peaceful Nuclear Cooperation Act 2006 (Hyde Act) shall also be made where relevant. Also, it should be clear that this legislation does not carry any international obligation on India as it is passed by the US Congress and relieves the US administration to carry out an Agreement based on section 123 of the Atomic Energy Act 1954 which, otherwise was prohibited by the U.S. Nuclear Nonproliferation Act 1978. Apart from discussing the current nuclear deal an attempt would also be made to highlight the importance of two International Bodies viz- International Atomic Energy Agency (IAEA) and Nuclear Supplier Group (NSG). The former is established by an International Treaty while the latter is an informal gathering of the States having capacity to supply nuclear material and technology. The issues that are going to be addressed in this Chapter relate to the membership in these bodies and all related issues along with their *locus standi* in the current Nuclear Deal. Apart from this the politico-legal elements involved in the nonproliferation regime shall also be discussed.

The issues that this study shall endeavour to look into shall be the following:

(1) The status of Joint Declaration under International Law.

(2) An interpretation of the terminology used in the 18 July 2005 joint statement and the separation plan signed on 2 March 2006.

(3) Provisions of the Hyde Act.

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[1] See Annexure III

[2] See Annexure IV

[3] See Annexure V

(4) The relationship of IAEA with the present Nuclear Deal and also the status of IAEA under International law as it is mentioned in the Vienna Convention on Law of treaties entered on 23 May 1969, the principles of which are universally acceptable to all states as the customary source of International law.
(5) The status of Nuclear Supplier's Group under International Law so as to having capacity to affect the bilateral agreement entered between the two States and in large measure to a global stage.
(6) The Nuclear Deal and the Nonproliferation Regime

B. Joint Statement and International Law:

The Joint Statement signed between India and US on 18 July 2005 is of such importance as it would form the basis to lay down the new *lex ferenda*[4] for both the states while they agree upon an international Agreement. Once an agreement is entered into by both the States the mode of implementation would be as provided under their respective domestic law, which is discussed in detail in the next Chapter.

Generally when an Executive enters into an international agreement a legitimate expectation arises that it will act in accordance with the provisions of such statement albeit, it may not necessarily go for a legal way of adopting such a Statement. International law recognizes treaties, customs and general principles of law recognized by States as sources of law and confer lesser or no binding obligation to States on other forms of agreements. The outcomes of international Summit level discussions pronounced in the form of Declarations, Statements or any other communiqué does not form a binding force (hard law) under international law and States are not bound by the obligations mentioned in them. According to Starke as he refers in his *tour de force* that the political declarations, or the accords spelled out in communiqués of summit conferences are not intended to create legal relationship (Starke1984: 414). The Joint Statements agreed upon by US and India was a result of summit meeting between President Bush and Prime Minister Manmohan Singh so it could not in the *stricto sensu* create a legal binding effect on either of the states. However, the Joint Statements set out an important

[4] *lex ferenda means* legislative policy.

guideline for the completion of an Agreement (here it is 123 Agreement) as it consists of conditions which both the States have agreed to perform.

As we know, Soft Law includes non binding legal acts (opinions, joint Statements and recommendations) whose real significance is political or moral and other forms of Community actions that are not legal acts but are used for forming and shaping the Community legal order (resolutions, declarations and joint statements). Though international law does not recognize Joint Statement to have any legal binding it does recognize the *intent of the parties* to give effect to such conditions. The fact that the States have entered into the Statements shows that they have an obligation to perform the duties referred to therein. An instance may be cited of the EC Soft Law on Development which includes the Joint Statement by the European Council.[5] The Development policy requires the EU Member States to perform the obligations that have been agreed to. EC Soft Law on development includes the Joint Statement by the Council and the member States meeting with the Council, the EP and the Commission on the European Union Development Policy and decisions on contributions to International Programmes (e.g., GEF, Food Aid, Global Fund to Fight HIV/AIDS) as well as policy statements, both general and regional, theme or sector specific, adopted by the Union through Council Resolutions in the case of Communications from the Commission to the Council.

The 18th July, 2005 Statement provides among other things the following set of duties on the part of India. It provides that India will:

(1) Identify and separate civilian and military nuclear facilities and programmes and file a declaration with the IAEA regarding its civilian facilities;
(2) Place voluntarily its civilian nuclear facilities under IAEA safeguards;
(3) Sign and adhere to an Additional Protocol with respect to civilian and nuclear facilities;

[5] The EU Development Policy: Rights and Obligations of New Member States - sustainable economic and social development, smooth and gradual integration of developing countries into the world economy, poverty reduction, development and consolidation of democracy and the rule of law.for greater details on it See {online:web} Accesed on 23 may 2007,URL: http://www.abgs.gov.tr/tarama/tarama_files/30/SC30EXP_Development%20Policy_text.pdf

(4) Continue its unilateral moratorium on nuclear testing;

(5) Work with the U.S. for conclusion of a Fissile Material Cut-Off Treaty (FMCT)[6] to halt production of fissile material for nuclear weapons;

(6) Refrain from the transfer of enrichment and reprocessing technologies to States that do not have them and support efforts to limit their spread; and,

(7) Secure nuclear and missile materials and technologies through comprehensive export control legislation and adherence to the Missile technology control regime and Nuclear Suppliers Group.

On the other hand U.S. had to:

(1) Seek agreement from Congress to adjust its Law and policies;

(2) Work with friends and allies to adjust international regimes to enable full civil nuclear energy cooperation and trade with India; and

(3) Consult with partners on India's participation in the fusion energy International Thermo-nuclear experimental Reactor (ITER) consortium and Generation IV, International Forum, the work of which relates to advanced Nuclear Energy System.

India according to the Separation Plan document[7] has already fulfilled the following of its obligations.

(1) India's responsible non-proliferation record, recognized by the US, continues and is reflected in its policies and actions.

(2)The harmonization of India's export controls with Nuclear Supplier Group (NSG) and Missile Technology Control Regime (MTCR) Guidelines even though India is not a member of either group. These guidelines and control lists have been notified and are being implemented.

(3)A significant upgrading of India's non-proliferation regulations and export controls has taken place as a result of Weapons of Mass Destruction Act of May 2005. Inter-Ministerial consultations are ongoing to examine and amend other relevant Acts as well as framing appropriate rules and regulations.

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[6] Fissile Material Cutoff Treaty which is still to be negotiated and signed by both the States.

[7] It deals with the separation of civil and military nuclear facilities. See Annexure V.

(4)Refrain from transfer of enrichment and reprocessing technologies to states that do not have them and supporting international efforts to limit their spread. This has guided our policy on non-proliferation.

(5) Continued unilateral moratorium on nuclear testing, and

(6) Willingness to work with the United States for the conclusion of a multilateral FMCT.

Though the conditions agreed upon have not taken the form of a treaty the conditions under the Joint Statements have to be complied with as they form part of consent by a State under international law which is liable to be complied with.

C. Nuclear Deal: A Critical Assessment

Criticism of the agreement has taken the shape of both political and strategic aspects and technical details. Some of the points like "India cannot have new nuclear bombs anymore," "India has given up its sovereignty" are instances of criticisms of a political nature. As Bharat Karnad perceptively observed, "the text of the implementation of the July 18, 2005 Joint Statement is so badly drafted from the Indian point of view (which is not surprising considering that the working draft was of American origin)-or, to put it bluntly, acquiesced in by the Indian negotiators led by Foreign Secretary Shyam Saran- that there is every chance that the spent-fuel from the indigenous PHWRs sequestered in the civilian sector, would be subjected to international safeguards just because they were products of reactors that will pass under IAEA safeguards in that case India's stockpile of spent fuel potentially visible for weapons will shrink alarmingly".[8]

The major issues in this Civil Nuclear Deal from the legal point of view are many. There have been many issues which form the part of discussion by the legal scholars in the Indo-U.S. Nuclear Deal. The following issues need better examination and a closer scrutiny.

C. 1 Right to Reprocess[9]:

[8] "The Blighted Strategic Future",{Online: web}Accessed 29 June, 2007 URL: http://www.india-seminar.com/2006/560/560%20bharat%20karnad.htm

[9] Nuclear reprocessing separates any usable elements (e.g., uranium and plutonium) from fission products and other materials in spent nuclear reactor fuels The term According to S-110 (12) of the

The US wants to forbid the right to reprocess spent fuel to India, but the same has not been done by it with respect to those countries that have placed all their reprocessing facilities under IAEA safeguards. India has not placed the Kalpakkam reprocessing plant and the Fast Reactor Fuel Reprocessing Plant under IAEA safeguards. Reprocessing of spent fuel is essential for India, especially in a future scenario when it will be importing reactors and fuel for its civil nuclear programme. A situation where India can neither reprocess spent imported fuel nor return it to the original suppliers is clearly undesirable (Reshmi Kazi [10]).

The US should recognise that without an unambiguous right to reprocess spent fuel from the reactors, there will be absolutely no support for the nuclear deal in India. After all, India has reprocessed spent fuel for more than four decades, and the plutonium obtained from that activity is critical for the second stage of the Indian nuclear programme built around the breeder reactors[11]. India even under 1963's "123 Agreement" was having this right however, India could never use that right since it was subject to joint determination. According to section II E of that Act which provided as follows: [12]

"It is agreed that when any special nuclear material utilized in the Tarapur Atomic Power Station requires reprocessing, and recourse is not taken by the Government of India to the provisions of Article VI C of this Agreement, such reprocessing may be performed in Indian facilities upon a joint determination of the Parties that the provisions of Article VI of this Agreement may be effectively applied, or in such other facilities as may be mutually agreed. It is understood, except as may be otherwise agreed, that the form and content of any irradiated fuel elements recovered from the reactors shall not be altered before delivery to any such reprocessing facility."

Despite this provision being clearly present in the above stated language in the 1963 Agreement, its basic requirement of joint determination could never be completed. Above mentioned, Article VI was related to various rights and duties of the parties with respect to Agreement and Article VIC the part thereof, was related

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Hyde Act is explained as "separation of irradiated nuclear materials and fission products from spent nuclear fuel".

[10] See Institute of peace and conflict studies seminar held at on the topic "Indo-U.S. Nuclear Deal: where are the Blocks" summary available at {online: web} accessed on 1st July,2007 URL: http://www.ipcs.org/whatsNewArticle1.jsp?action=showView&kValue=2323&status=article&mod=b

[11] Naturally occurring uranium consists of only 0.7% of the fissionable isotope of uranium-235 and needs to be enriched in the latter to be used as a fuel in a nuclear reactor. A breeder reactor is one that produces more fissionable nuclei than it consumes.

[12] Provided in the Annexure I

to the replacement of the fuel under mutually acceptable measurement arrangements.[13]

However, keeping in view the American susceptibility India needs to understand that there must be credible safeguards arrangements for the civilian reprocessing activity to assure the U.S. and other international partners that this sensitive activity is not susceptible to any military use. As on fallback safeguards the upcoming 123 Agreement is supposed to contain that in the event that the "IAEA determines that safeguards are no longer being applied" on U.S. supplied material, India and the U.S. must consult with each other and agree on an appropriate verification mechanism (The Hindu: 24 July, 2007).

There is nothing in the Hyde Act, which laid out the new law for Indo-US nuclear cooperation last December that prevents the Bush administration granting India the right to reprocess spent fuel. And the recent Indian offer of building a new plant to reprocess spent fuel under credible safeguards has the merit of addressing American non-proliferation concerns.[14]

Section104 (d) of the Hyde Act mentions about Restrictions to Nuclear Transfers. Sub-paragraph (4) (B) of this section allows transfer of Sensitive Nuclear Technologies under three circumstances. First, if the end user is a multinational facility participating in an IAEA approved programme to provide alternatives to national fuel cycle capabilities or is part of a bilateral or multinational programme to develop a proliferation resistant fuel cycle. Both these ideas are worth exploring by India, and could make India a producer and exporter of nuclear fuel to an expanding reactor market.

Second, if appropriate measures are in place against illicit diversion of technology. This is a non-issue since India's facilities using imported technology or fuel would be under IAEA safeguards, and subject to extensive export controls.

The third situation in which India could import reprocessing technology is if the original Agreement for Cooperation, ("the 123 Agreement") would specify that such cooperation is authorized, or, an amended agreement would be submitted to

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[13] ibid

[14] See C. Raja Mohan 13 July 2007 in the *Indian Express*

Congress for that purpose. As is evident, the Congress is seeking to retain the right to review and approve such cooperation, whilst providing the Executive with the authority to include it in the cooperation agreement.

Congress has also prohibited the transfer of sensitive nuclear technology to India, including uranium-enrichment, plutonium-separation, and heavy water production-related equipment, except under certain narrow circumstances.[15] India is seeking relief from this prohibition. For over three decades, U.S. non-proliferation policy has sought to discourage the spread of sensitive nuclear technology, which can be used to make nuclear bomb material. As pointed in a letter addressed to the Senate by George Bunn and *et al* that U.S. nuclear cooperation agreements, with such cooperating partners as EURATOM, Japan, South Africa, and China, expressly prohibit transfers of such technologies. India should not in any way be an exception to this important policy.[16]

Among various other things section 104 (b) (5) lays down for presidential determination among the conditions for the exemption and waiver authority. It lays down that:

> "India is working with and supporting United States and international efforts to prevent the spread of enrichment and reprocessing technology to any state that does not already possess full-scale, functioning enrichment or reprocessing plants."

This is what the President has to determine who having the executive power will determine so. Thus from the above it can be seen that this act is directly in conflict with the provisions of the 18 July Statement on the issue of "full civil nuclear energy cooperation. Bharat Karnad has rightly pointed out that the text of

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[15] See: Section 104(d) (4) of the Henry Hyde Act in the Annexure VI

[16] This letter was addressed to the Senate by George Bunn and the Hal Bengelsdorf, Consultant, and former Director for the Office for Nonproliferation Policy at the Energy Department, and former Office Director for Nuclear Affairs at the State Department, Joseph Cirincione, Senior Vice President for National Security and International Policy, Center for American Progress, Jean du Preez, Director of the International Organizations and Nonproliferation Program at the Center for Nonproliferation Studies, Amb. Ralph Earle II, Former Director of the U.S. Arms Control and Disarmament Agency, Frank von Hippel, Professor of Public and International Affairs, Program on Science and Global Security, Princeton University and *et al* on 17th May 2007 see {online: web}accessed on 15th June,2007 URL: http://www.armscontrol.org/pdf/20070517letteronUSIndia123Senate.pdf

the Joint Statement is so badly drafted that full nuclear cooperation is not ably discernible.[17]

C. II If India Detonates a Nuclear Weapon:

Another issue relates to assured fuel supply. This relates to the creation of a credible framework for ensuring fuel supplies to India in the wake of a future decision by Washington to terminate nuclear cooperation with New Delhi(Raja Mohan: 13 July 2006: Indian Express)

Under the terms of the 123 Agreement the U.S. and NSG members would cease to transfer any items of technology controlled by the NSG Trigger List, if India were to conduct another test. India has unilaterally declared a moratorium on further testing in 1998 after its nuclear tests. However, India's voluntary moratorium cannot foreclose the option for a future government to test if national interests so demand. India is not in favour of converting its unilateral moratorium into a bilateral legality. Besides, the condition regarding testing is viewed with suspicion as a ploy to force India's entry into the CTBT by the backdoor.[18]

Section 104(d) (3) of the Hyde Act provides for the circumstances in which the transfer of the Nuclear Material can be terminated. The US will however have to assure the reliable supply of nuclear fuel on a timely basis and on the conditions specified in the 123 Agreement. This is already part of the proposed US 123 agreement. India fears termination of this cooperation agreement in case of a nuclear detonation by it (Reshmi Kazi[19]).

The presidential determination under section 106 of the Hyde Act will cease to have operation as per its provisions .It provides that "A determination and any waiver under section 104 shall cease to be effective if the President determines that India has detonated a nuclear explosive device after the date of the enactment of this title". However the Act explicitly goes beyond the existing provisions of US

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[17] He has explained it in The Asian Age : 26 March and 17 May, 2007 also see more of his views in *Seminar*, 560 April 2006.

[18] M.R Srinivasan, The Hindu: 18 June 2007

[19]See Institute of peace and conflict studies seminar held at on the topic "Indo-U.S. Nuclear Deal:where are the Blocks" Summary available at {online: web} accessed on 1st July,2007 URL: http://www.ipcs.org/whatsNewArticle1.jsp?action=showView&kValue=2323&status=article&mod=b Ibid.

law, which empowers the president to continue exports on strategic grounds despite the test by the India[20]

Thus it can be seen from the provisions of the Act that the Nuclear Cooperation between the two countries will cease to take place if India test fires even a single nuclear weapon in whatever circumstances except when president determines otherwise. Chellaney has questioned "doesn't the Hyde Act apply the principle of extraterritorial jurisdiction to regulate India's conduct thereafter by perpetually hanging the Damocles' sword of exports cut-off over its head?" It is submitted to Chellaney's argument that the Act has nothing to do with international Agreement. What it does is, to obligate U.S. executive to enter into an agreement with India in conformity with its Law. It is further submitted that President has declared that various parts of the Act as forming an instrument of policy to which administration is not bound to adhere for entering in agreement with India.[21]

It should be noted that in the "123 Agreement" test of a nuclear weapon by India should not be *prohibited* or *obfuscated* in all circumstances. Upon this test the question that arises is what shall be the future of the Deal (123 Agreement) if this detonation takes place. That also needs to be clearly spelt out in the "123 Agreement", however, it can be recalled that such a provision was not there in the 1963's such Agreement with respect to Indian detonation. Among other things the legally arguable thing pertains to the Right of Return to the United States of America.

C.III Right to Return:[22]

Section 123(a)(4) of the U.S. Atomic Energy Act (AEA) provides the U.S. the "right (in agreements for cooperation with non-nuclear-weapon states) to require the return of any nuclear materials and equipment transferred and any special material produced through the use thereof, if the cooperating country

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[20] Brahma Chellaney in *Times of India,* January 9, 2007.

[21] At the time of signing in ceremony president gave these remarks. See for greater details URL: http://www.whitehouse.gov/news/releases/2006/12/20061218-1.html

[22] Right to return means the right conferred by the Agreement to require the return of the fissile material and the technology related therewith.

detonates a nuclear explosive device."[23] India rightly fears that the enforcement of this provision, in full or in part, would result in heavy financial loss to India as a result of the closure of the reactors. There are two ways available to protect India against such loss.

The first of these as per Balchandran would be,[24] for the US President to exempt the 123 Agreement from the requirement of Sec.123 (a) (4) - which is allowed under the Atomic Energy Act - with a determination that the "inclusion of such a requirement would be seriously prejudicial to the achievement of the United States non-proliferation objectives or otherwise jeopardize the common defense and security."[25] It would not be difficult to establish that the failure of the 123 Agreement, and the consequent isolation of India from global civil nuclear commerce, would affect U.S. nonproliferation objectives. The procedure for the Congress to ratify such an agreement would be identical to the procedure for ratification of a 123 Agreement with such a clause. If Congress chooses to reject such an Agreement, then the blame for the failure of the Indo-US agreement would lie at its feet and not the two governments.

Secondly,[26] it is argued that the U.S. should be required to compensate India for all the losses it would have to bear on account of the closure of the reactor; including, costs associated with the loss of revenue on account of closure; loss on account of replacing the transferred reactor with another indigenous reactor; and other costs that may occur as a result of the return of the transferred reactor and materials. Such a clause in the 123 agreement would not be unusual. Art. 12(4) of the US-Japan 123 Agreement, dealing exactly with such a possibility states: "(B)efore either party takes steps to cease cooperation under this Agreement, to

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[23] See U.S. Atomic energy Act, 1954, at {online:web} Accessed on 15 December 2007, URL: http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0980/ml022200075-vol1.pdf#pagemode=bookmarks&page=14

[24] India and the U.S- India Agreement for civil Nuclear Cooperation, By G. Balchandran, See {online:web} Accessed on 20 June 2007 URL: http://www.idsa.in/publications/stratcomments/GBalachandran030707.htm

[25] CRS Report ,order code R L 33016, "U.S. Nuclear cooperation with India Issues for Congress" accessed on 15 March 2007, {online: web} URL: http://fpc.state.gov/documents/organization/78420.pdf.

[26] See note by G. Balchandran opt cited {online: web} Accessed on 20 June 2007 URL: http://www.idsa.in/publications/stratcomments/GBalachandran030707.htm

terminate this Agreement, or to require such return, the parties shall consult for the purpose of taking corrective steps and shall carefully consider the economic effects of such actions, taking into account the need to make such other appropriate arrangements as may be required".

If the U.S. claims such right it would be a one-sided concept that the supplier is at liberty to terminate cooperation retroactively. America's new proposal is to formulate an intricate, drawn-out process to give effect to an explicit US right to an all-encompassing return of transferred nuclear items and materials if it terminates cooperation on grounds that its continuation would jeopardize its supreme national interests[27]. By making the actual implementation of the "right to return" problematic, the proposal aims to calm India. However, such semantic subterfuge in the draft 123 accord seeks to obscure the key point: any acknowledgement of the American right to seek return on account of a US-determined Indian non-compliance with non-proliferation conditions would turn India's voluntary test moratorium into a binding, irrevocable prohibition through a double instrument — a bilateral agreement atop the Hyde Act.[28]

The demand for "right-to-return" and the Hyde Act Section 106 prohibition on further testing are part of the same design that has prompted the Bush administration to propose an NSG exemption for India tied to a test ban. India in this way according to Chellaney is being dragged through the backdoor into the CTBT, rejected by the U.S. Senate itself in 1999. By going beyond the CTBT and technically quantifying a nuclear-explosive test, the Hyde Act actually seeks to hold India to CTBT-plus obligations.[29]

The 1963 Agreement for cooperation i.e. "123 Agreement of the past also contained this right with respect to circumstances wherein the return might be called for under Article VI D and Article VIII C.

Elaborating on the `right of return' issue, the Indian Foreign Minister noted that the fact that the nuclear deal would be "India-specific" was designed to ensure that any strategic reserves of fuel that India would build up sometimes called

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[27] *The Hindu*, News paper, 18th June 2007.

[28] Brahma Chellaney, 'Seismic subterfuge' *Asian Age,* May 15, 2007.

[29] ibid

lifetime reserves of fuel would not be covered by the `right of return' clause(11 June,2007 The Hindu)

D. Hyde Act and the Nuclear Deal:

Most of the significant issues pertaining to the Hyde Act have though been discussed, yet, it seems relevant to have a brief discussion on the Hyde Act separately as well. So the issues discussed already shall not be repeated.

The Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act now has become a legislation of the U.S. Congress. With the passage of this Act no doubt history has been recreated. India now has a credible chance to legally access civilian nuclear technology while keeping its nuclear weapons program if the Agreement currently under negotiation comes into existence. Critics in India have called this Act as complete sellout of our foreign policy and our nuclear programs – both civilian and military. Supporters such as C. Rajamohan[30] on the other hand, call the Henry Hyde Act a clear and uninhibited victory. As in most such polarized arguments, the truth is somewhere in between. India gained something – nuclear cooperation – while losing on other fronts.

To truly understand the implications of the Act, it must be analysed on two fronts: (1) nuclear programme and (2) foreign policy. For India, the original intent of the Nuclear Deal was two fold. On the nuclear front, India hoped to access civilian nuclear technology and fuel to expand its domestic program. On the foreign policy front, it hoped to create an India-specific niche for itself, justifying its nuclear non-proliferation and military credentials.[31] In that two-faced analysis the real losses for India are not the tangible ones, such as loss of control over the civilian program. Rather, it is the loss of power India will face in future foreign policy negotiations. And that loss has less to do with the original agreement and more to do with how India has handled the passage of the subsequent Henry Hyde Act through the US Congress.

The following set of criticism of the Hyde Act *inter alia* needs consideration:

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[30] The Author has also published a book entitled as *Impossible Allies* referring to the present Nuclear Deal given in the reference.

[31] See separation plan document provided in Annex VI

(1) Civil Nuclear cooperation is not "full" as is mentioned in the 18th July Joint statement and excludes enrichment and reprocessing technology, which we need to complete for our three-stage nuclear fuel cycle.[32]

(2)India does not get unconditional access of uranium fuel or technology as per the mentioned Act. In particular, all cooperation will be stopped should India test another nuclear weapon.[33]

(3)The US President must report annually on India's nuclear program. Such reporting can, and probably will, be used to pressure India on other fronts.[34]

Now, the first point to remember is that the 123 Agreement is to be an Agreement under the new Act and other US laws like the Atomic Energy Act of 1954 and Arms Control Act. The Agreement will be just an instrument to operationalise what this new law has provided. For this reason, there is going to be nothing in the 123 Agreement which is not already known. That Agreement will be consequential to, and be governed by the Hyde Act as per the U.S legal system. It does not have to have a clause saying that all exports shall terminate upon India testing a nuclear device — for that is already provided as a condition in the Hyde Act. It does not have to say that India make a public declaration to the effect that we will adhere to the Proliferation Security Initiative since this is also provided in the Hyde Act.

Moreover, the 123 Agreement is required to contain specifications in regard to only one of the matters that are covered by the new Act i.e. the export to India of nuclear reactors, fuel, materials and technology etc. It need not contain many sections of the law precisely because that Agreement is not the place to include them. The Agreement need not contain the sections precisely because they have already been legislated in other laws — like this new Hyde Act. In this way, this

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[32] As mentioned by Bharat Karnad see in detail in "The Blighted Strategic Future",{Online: web}Accessed 29 June, 2007 URL: http://www.india-seminar.com/2006/560/560%20bharat%20karnad.htm

[33] Section 106 of Hyde Act which says that "A determination and any waiver under section 104 shall cease to be effective if the President determines that India has detonated a nuclear explosive device after the date of the enactment of this title".

[34] See S-104 (c)

123 Agreement can yet again have the ambiguities of the kind that were in the 1963 Agreement.

Brahma Chellaney[35] points out that there are today 23 agreements in operation under Section 123. Each differs a great deal from the other. The least that we could have done was to prepare our own draft, and negotiate on that basis. In fact, as Nicholas Burns' statement to PTI and rediff.com reveals, the Americans are the ones who have swiftly given the draft. As a consequence, their draft is the one that will now be the basis of negotiations. The oldest trick in negotiations is to be first with the draft; to put the maximum number of conditions in it, in particular to put some conditions that you are certain the other side just cannot accept; and, then, with much foot-dragging, with much show of reluctance "take account of your concerns" and delete or modify some of those conditions.

The equally important fact is that we have already had our fill of bitter experience of how a 123 Agreement works, and what store Americans put by it. The US signed a 123 Agreement with us in 1963. An early book of Brahma Chellaney records the sorts of provisions that the 1963 Agreement contained, provisions that are nowhere near what we will now be faced with in the new 123 Agreement. Two examples will suffice to show it. The 1963 Agreement provided that the US will give fuel for Tarapur as needed by India. Second, it provided that the US will have the first right to spent fuel in excess of India's needs for peaceful nuclear energy — only the first right to it, not a veto on us reprocessing it, should the US decide not to lift the spent fuel.

Under-Secretary of State Robert Joseph himself acknowledged to the Senate Foreign Relations Committee on November 2, 2005, that whether India had "illegally" used the CIRUS reactor for military purposes was still "inconclusive owing to the uncertainty as to whether US-supplied heavy water contributed to the production of plutonium used for the 1974 device."[36] In other words, the US cannot to this day say that India violated any term of the 1963 Agreement.

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[35] See *Asian Age*, 14 may 2007

[36] This was the SFRC meeting where Robert Joseph discussed in detail the provisions of the 18 July Statement. Opt cited.

Yet, the US terminated all supplies of fuel for Tarapur in 1974, saying that, whether India has violated the Agreement or not, by detonating a nuclear device, it has violated the intent of domestic US laws. The US has refused to take it back. And we have not felt we could proceed to reprocess it ourselves. We have unilaterally continued to adhere to the 1963 Agreement even though the US unilaterally repudiated it in 1974, and even though the Agreement itself expired in 1993.

The U.S. terminated the fuel supplies, it repudiated the 123 Agreement of 1963 even when there was at that time no India-specific law i.e. like Hyde Act, to govern that atomic Energy Cooperation Agreement. There was no other law that applied to India. But this time round, the U.S. Congress has enacted an India-specific law which lies down, as the Joint Explanatory Statement to the Act states, "the procedures and conditions that are to govern nuclear cooperation with India."[37] How will the 123 Agreement, not be bound by the provisions of this law is yet to be seen.

E. International Atomic Energy Agency:

The role that International Atomic Energy Agency (IAEA) has to play in the present nuclear deal shall be explained in greater detail. Prior to this let us understand what this body is. IAEA was established as an autonomous organization on July 29, 1957. It seeks to promote the peaceful use of nuclear energy and to inhibit its use for military purposes. United States President Dwight D. Eisenhower envisioned, in his "*Atoms for Peace*" speech before the UN General Assembly in 1953, the creation of this international body to control and develop the use of atomic energy. The organization and its Director General, Mohamed ElBaradei, were jointly awarded the Nobel Peace Prize announced on 7 October 2005.[38]

The IAEA has its headquarters in Vienna, Austria. Apart from it, two "Regional Safeguards Offices" are located in Toronto, Canada; and Tokyo, Japan.

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[37] See Hyde Act in Appendix VI.

[38] For more details see the [online: web]Accessed on 20 November 2006, URL: http://en.wikipedia.org/wiki/Mohamed_ElBaradei .

The IAEA has two liaison offices, located in New York, USA and Geneva, Switzerland. In addition, it has laboratories in Seibersdorf and Vienna, Austria, Monaco and Trieste, Italy.[39] It was in the Review Conference of the year 2000 that the IAEA infrastructure, nuclear centre and the laboratories were discussed in great detail[40].

In order to understand the role of IAEA in the present Nuclear Deal it is better to understand the status of IAEA under the International Law. International Atomic Energy Agency according to Article II of its statute has the following objective:

"The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health, and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose."

This is the primary purpose of the IAEA as spelled out in its statute. Let us have an understanding of the status of IAEA under international Law.

E.I. Status of IAEA

IAEA is not a specialized agency under the United Nations family but it has got a special status in the United Nations (Bowett 1982: 65). U.S. President Eisenhower, in his 1953 UN General Assembly address, proposed establishment of an agency under the United Nations that would devote its activities exclusively to the peaceful uses of atomic energy. One year later, the General Assembly unanimously passed an "Atoms for Peace" resolution[41] supporting the establishment of such an organization. In 1956 a multilateral treaty was adopted as the Statute of the International Atomic Energy Agency. The Government of

[39] Further details are available at {online:web}Accessed on 19 November 2006 URL: http://en.wikipedia.org/wiki/International_Atomic_Energy_Agency.

40. 2000 Review Conference of the Parties NPT/CONF.2000/... to the Treaty on the Non-Proliferation February 2000 of Nuclear Weapons ENGLISH Original: ENGLISH New York: 24 April 2000 – 19 May 2000 Activities of the International Atomic Energy Agency Relevant To Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons. Background Paper Prepared by the Secretariat of the IAEA February 2000, see {online Web} Accessed on 25 February 2007, URL: http://f40.iaea.org/worldatom/Press/Events/Npt/iaea_npt_art4.pdf.

[41] U.N.General Assembly Resolution 23 November 1954.

Austria offered Vienna as the host city for the new organization, and the IAEA is still headquartered on the banks of Strauss' "Blue Danube."

From its creation, the agency has occupied a distinctive position in the UN system. It is an autonomous, inter-governmental organization but not a specialized agency of the United Nations.[42] Nonetheless, its statute mandates that it "conduct its activities in accordance with the purposes and principles of the United Nations to promote peace and international cooperation."[43]

According to Article 57 of the UN Charter specialised Agencies shall be brought into relationship with the United Nations as per the terms of Article 63 of the Charter. As per Article 63, such Agency is required to enter into an Agreement with the ECOSOC which shall be subject to the approval by the General Assembly. However nothing as such was done in the creation of IAEA. In so far as the IAEA is concerned as Bowett points out that "International Atomic Energy Agency is not a specialized agency; The agreement with the U.N. approved by the General Assembly on November 14, 1957, is modelled on the agency agreements" he further adds "because of the implications for peace and security of development of nuclear energy, the General Assembly and the Security Council the organs with which the main relationship exist, and not the ECOSOC "(Bowett 1982: 65).
Furthermore, the *ultima ratio* as an evidence of not its carrying the status of specialized Agency can be witnessed by Article 81 of VCLT which, in its 'Signature' provisions mentions members of any of the 'Specialized Agencies' and 'International Atomic Energy Agency' separately for becoming a party to that treaty. Thus it can be well understood that IAEA is not like any other Specialised Agency to the United Nations family.

E.II IAEA and the Nuclear Deal:

According to the Joint Statement of July 18th India is required to:[44]
(a) File a declaration regarding its civilian facilities with the International Atomic Energy Agency (IAEA);

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[42] Under the charter of the United Nations a specialized Agency is established in accordance with Article 57 and 63.For greater detail see Commentary on the Charter of United Nations by Leland M. Goodrich and Edvard Hambro. (1969) Boston, Published by world peace foundation.

[43] U.N. charter Article 1(1).

[44] Seee Annexure III

(b) Take a decision to place voluntarily its civilian nuclear facilities under IAEA safeguards; and

(c) To sign and adhere to an Additional Protocol with respect to civilian nuclear facilities

Almost the same words are used in the Separation Plan i.e.

(a) Filing a declaration regarding its civilian facilities with the IAEA.

(b) Taking a decision to place voluntarily its civilian nuclear facilities under IAEA safeguards, and

(c) Signing and adhering to an Additional Protocol with respect to civilian nuclear facilities.

So, by taking a decision to place voluntarily its civilian nuclear facilities under IAEA safeguards, India can now negotiate with the IAEA on broad outline of the safeguard provisions. Under the existing international arrangements, all the nuclear weapon states as defined by the NPT have signed separate voluntary offer agreements with the IAEA on *declared* civilian facilities as different from the non nuclear weapon states. As far as India is concerned, now it can avail a similar option without being declared a nuclear weapon state. IAEA's access to R & D endeavours can also be negotiated for that matter. But, keeping the strategic objectives clear, India did not want the IAEA inspectors to come to the Bhabha Atomic Research Centre (BARC), a strategic facility where the CIRUS is located, and have therefore decided to shut it down in 2010." (March 10: The Hindu).

The Joint Statement of 18 July refers to India "taking a decision to place voluntarily" (emphasis added) its civilian nuclear facilities under IAEA safeguards. An unlikely voluntary arrangement on the pattern of five NWS could have enabled India to offer more number of facilities for safeguards and withdraw these whenever required citing national security interest. Such a provision if agreed could have essentially placed India squarely in the company of NWS. It was however, outrightly rejected by the U.S Administration as well as the Congress. Under Secretary of State for Arms Control and International Security Affairs, Robert Joseph, while testifying before the Senate Foreign Relations Committee said; "U.S. would not view a voluntary offer arrangement as defensible, and the

safeguards must be applied in perpetuity."[45] Similarly, Chairman Senate Foreign Relations Committee, Senator Richard Lugar had made it clear at the very beginning of the nuclear debate that the Committee will judge the efficacy of the separation plan in terms of three key criteria. He identified these as "safeguards, non-assistance and transparency."[46]

There are currently three types of Safeguards Agreements in vogue (1) INFCIRC/66 (2) INFCIRC/153 and (3) Voluntary Safeguards Agreements.[47] It is not yet clear what will be the final outcome of the on going negotiations between India and the IAEA. India could ask for a facility specific safeguards on the pattern of INFCIRC/66 agreements on its designated civilian facilities individually or collectively for all of its civilian facilities in the agreed separation plan. These would then be 'in perpetuity' and would thus preclude future use of any of these designated civilian facilities for the production of nuclear material for nuclear explosive purposes, and would also eliminate possibility of withdrawing any of these facilities from safeguards for national security purposes. The other type of safeguards INFCIRC/153, which is also known as comprehensive safeguards agreement, is essentially for non-nuclear weapon states (NNWS). The existence of weapons oriented component in the Indian nuclear program automatically rules out possibility of a comprehensive safeguards arrangement under INFCIRC/153, as, technically India does not fall into the category of NNWS. During the on going discussion on the type of safeguards with the IAEA, India would continue to push for a favourable arrangement, which could help in an implicit recognition of India as a NWS.

As PM Manmohan Singh in his address to the Indian parliament had earlier stated; "United States has implicitly acknowledged the existence of our nuclear weapons program as a responsible State with advanced nuclear technologies, India

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[45] Statement of Robert G. Joseph, Under Secretary of State for Arms Control and International Security, November 2, 2005 Senate Foreign Relations Committee India Hearing. As referred earlier about his speech.

[46] Seema Mustafa, "Nuke Plan Not Given to Cabinet, Sent to US", The Asian Age, January 7, 2006.

[47] See Shyam Babu(1992) *"Nuclear Nooproliferation towards a universal NPT Regime"* New Delhi, Konark pub.

should acquire the same benefits and advantages as other States which have advanced nuclear technology, such as the United States."[48] As Tellis noted that the "NWS including the U.S. have the right to shift facilities from civilian category to military and there is no reason why this should not apply to India."[49] However, ultimately it can be submitted what Hans Blix is said to have said that "safeguards can not prevent a violation of obligations.....any more than bank or company audits can prevent a misappropriations of funds"[50]

F. The Nuclear Supplier Group:

The Nuclear Suppliers Group is a group of States supplying nuclear material to States. It seeks to contribute to the nonproliferation of nuclear weapons through the implementation of two sets of Guidelines for nuclear exports and nuclear-related exports. The NSG first met in November 1975 in London, and is thus popularly referred to as the "London Club" ("Club de Londres").This group of States was formed informally.

The NSG was created following the explosion in 1974 of a nuclear device by a NNWS i.e. India[51] , which demonstrated that nuclear technology transferred for peaceful purposes could be misused. It is an informal voluntary grouping that aims to harmonise implementation of controls on export of sensitive nuclear and dual use equipment, materials and technologies to prevent diversion to non-peaceful use and to strengthen the arrangements of the Zangger Committee.[52]

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[48] Prime minister's speech on 17 August 2006 in Parliament.

[49] Ashley Tellis, "*India as a New Global Power: An Action Agenda for the United States*", Carnegie Endowment for International Peace, 2005, p.25.

[50] See Shyam Babu as opt. cited.

[51] This was not an NPT status, as NNWSs are referred generally but, It was a NNWS outside NPT.To make this point clear VCLT 1969 can be referred as it provides under article 34 that "A treaty does not create either obligations or rights for a third State without its consent."

[52] The Zangger Committee was formed in the early 1970s to establish guidelines for implementing the export control provisions of the NPT (Article III (2)). It was named so for its first chairman prof. Claude Zangger, for further greater details see (online: web) Accessed on 20 July 2007 URL:http://www.fas.org/nuke/control/zangger/index.html

The NSG has developed "Guidelines for Nuclear Transfer"[53]. The NSG Guidelines are broader in scope than the Zangger List in terms of export conditions and in that NSG Guidelines also cover dual use items. The NSG periodically reviews its guidelines and control lists to ensure they reflect technological advances (NSG website).

The aim of the NSG, which currently has 45 Participating Governments, and the European Commission as a permanent observer, is to prevent the proliferation of nuclear weapons through the implementation on a national basis of export controls of nuclear and nuclear-related material, equipment, software and technology, without hindering international cooperation on peaceful uses of nuclear energy.[54]

As there is no formal criterion leading to the formation of this Group as it is an informal gathering of states having concern with the proliferation, so no question of formal criteria for membership arises for such an informal Association. So is also no such formal criterion for the subsequent addition in the membership. To this date 45 States are the members consisting this Group. Apart from this European Commission has been designated the status of Permanent observer. The informal criterion that is followed for providing the membership of this Group is as follows:[55]

(1) The ability to supply items (including items in transit) covered by the annexes to Parts 1 and 2 of the NSG Guidelines;

(2) Adherence to the Guidelines and action in accordance with them;

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[53] contained in IAEA document INFCIRC/254, Part 1) relating to nuclear material, equipment and technology specific to the nuclear industry, under which recipient governments must provide formal assurances that items will not be diverted to unsafeguarded nuclear fuel cycle or nuclear explosive activities. Subsequently it established "Guidelines for Transfers of Nuclear-related Dual-use Equipment, Materials, Software and Related Technology" (INFCIRC/254, Part 2), relating to items which have both nuclear and non-nuclear applications.

[54] For a greater detail see {online:web} Accessed on 15 March 2007, URL:http://www.nuclearsuppliersgroup.org/PRESS/2007-08-Cape-Town.pdf.

[55] For greater details see {online:web} accessed o 2 march 2007, URL: http://www.fas.org/nuke/control/nsg/index.html

(3) Enforcement of a legally based domestic export control system which gives effect to the commitment to act in accordance with the Guidelines;

(4) Full compliance with the obligations of one or more of the following: the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Treaties of Pelindaba, Rarotonga, Tlatelolco, Bangkok, or an equivalent international nuclear non-proliferation agreement.[56]
(5) Support of international efforts towards non-proliferation of weapons of mass destruction and of their delivery vehicles.

NSG was inactive for an extended period until revitalized after the end of the Cold War. In 1990 nuclear supplier states recognized that the nonproliferation regime was threatened by activities like those of Iraq, which carried out a covert and illegal nuclear weapons programme based on imported technologies many of which were not subject to export controls. In 1992 the NSG extended controls to nuclear related dual-use items as well as strengthening information sharing and coordination among export control authorities. A full scope safeguards agreement with the IAEA was made a condition for the future supply of trigger list items to any non-nuclear weapons state by an NSG member state (Stockholm International Peace Research Institute: 2005)[57].

F. 1. Aims of NSG:[58]

NSG members pursue the aims of the NSG through adherence to NSG Guidelines that are adopted by consensus, and through an exchange of information, notably on developments of nuclear proliferation concern.

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[56] Last year in September 2006 five more nations, viz. – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan – signed yet another Central Asian NWFZ. Centre for Nonproliferation Studies, {online: web} Accessed on 2 January,2007, URL: http://cns.miis.edu/pubs/week/060905.htm

[57] For greater details see {online: web} Accessed 0n 10 may 2007 URL: http://www.sipri.org/

[58] See in greater detail {online :web} Accessed on 15 may 2007 URL: http://nti.org/e_research/official_docs/inventory/pdfs/nsg.pdf

The first set of NSG Guidelines governs the export of items that are especially designed or prepared for nuclear use. These include:

(i) Nuclear material;

(ii) nuclear reactors and equipments for them;

(iii) non-nuclear material for reactors;

(iv) plant and equipment for the reprocessing, enrichment, and conversion of nuclear material and for fuel fabrication and heavy water production; and

(v) Technology associated with each of the above items. The second set of NSG Guidelines governs the export of nuclear-related dual-use items and technologies (items that have both nuclear and non-nuclear applications), which could make a significant contribution to an unsafeguarded nuclear fuel cycle or nuclear explosive activity.

The NSG Guidelines are consistent with, and complement, the various international, legally binding instruments in the field of nuclear non-proliferation. These include the (1) Nonproliferation Treaty, (2) Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco), (3) The South Pacific Nuclear Weapons-Free Zone Treaty (Treaty of Rarotonga), (4) African Nuclear-Weapons-Free Zone Treaty (Treaty of Pelindaba) and (5) Treaty on the Southeast Asia Nuclear-Weapons-Free Zone (Treaty of Bangkok).[59]

F. II. Nuclear Deal and the NSG:

Joint Statement issued on the 18 July mentions that "ensuring that the necessary steps have been taken to secure nuclear materials and technology through comprehensive export control legislation and through harmonization and adherence to Missile Technology Control Regime (MTCR) and Nuclear Suppliers Group (NSG) guidelines."[60]

[59] Refer to note 56.

[60] See the text of the Joint Statement in the Annexure III.

All 45 members of the Nuclear Suppliers Group are required to approve the US-India Civilian Nuclear Cooperation Agreement. The NSG requires full scope safeguards as a condition of civil nuclear cooperation with a NNWS as defined by the NPT. Presently India has agreed to voluntary safeguards over "civilian" facilities of its choosing, preventing the diversion of any part of India's existing fissile materials stockpile for weapons purposes. Nearly every non-nuclear weapon state has remained true to the core NPT bargain, forsworn nuclear weapons, and accepted full-scope safeguards.[61] Why should India get everything it wants at the expense of the non-proliferation regime? This question is raised by experts.[62] There is enormous political pressure to go forward with this India deal. However, Bush administration in the Joint Statement has appreciated India as a "responsible State with advanced nuclear technology". India has very real energy needs and there is competition to fill them. It is predicted that several players, selling nuclear and technological materials to India, will use this deal to advance their own agenda if the deal is successful. It is also believed that, it would be politically impractical to stubbornly oppose the deal; nevertheless, there are overriding interests in the safety of our entire solar system which Nuclear Energy may affect both ways constructively and destructively.

G. Nonproliferation Regime and the Nuclear Deal

At present the question that is being raised by the International legal experts is on the dilution of the present nonproliferation regime on the one hand and on the strengthening of that regime on the other.[63]Before we go into examination of it let us have certain aspects pertaining to the development of nonproliferation regime clear.

In the midst of war both countries had initiated the plan for nuclear Energy. For one it was also the exigency of war to develop the Nuclear weapons apart from

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[61] See {online: web} Accessed on 28 June, 2007 URL: http://www.gsinstitute.org/gsi/pubs/03_15_07_OAS.pdf

[62] Ibid

[63] On the one hand is Marie O Carranza and on the other is Nina Srinivasan Rathbun.For the views of the former see *Nonproliferation Review*, Vol. 13, No 2, July 2006, while the views of the later see in the *Contemporary Security Policy*, Vol.27, No 3, December 2006, pp. 489-525

nuclear energy. While for the other it was solely for the development and control of atomic energy.[64]

Four and a half months later, after the colossal destruction of the two populous cities of Japan, United Nations General Assembly (UNGA) adopted a unanimous resolution[65] that provided for the establishment of the Atomic Energy Commission comprising of the Five permanent members of the UN Security Council and Canada. The Atomic Energy Commission was charged with drawing up proposals on the following issues[66]:

(1) The free exchange of basic scientific information for peaceful ends.

(2) Control of Atomic Energy to the extent necessary to ensure its use only for peaceful purposes.

(3) The elimination of Atomic Weapons from National armaments

(4) The creation of effective inspection procedures to ensure compliance with the normative framework established.

After more than sixty years of such a resolution by the General Assembly,[67] there have been numerous efforts by the international community to regulate the nuclear proliferation which have been better discussed in Chapter II.

Nonproliferation experts have suggested[68] that potential costs to U.S. and global Nonproliferation policy of bringing India into the nonproliferation mainstream in this manner may far exceed the benefits. For example, at a time

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[64] See the speech delivered by the prime minister Nehru moving the Atomic Energy Bill in the Constituent Assembly (Legislative) Debates, official Reprt,Vol.V,1948,pp-315-334.

[65] UNGA Resolution(1),24 January 1946.

[66] For Detail apart from the Resolution mentioned see also "*Nuclear Weapons and International Law*' 1986, edited by Istvan Pogany,in which John Woodliffe writes an essay *Nuclear weapons and nonproliferation: the Legal Aspects.*

[67] See also UNSC resolution of 19 June 1968, in which UNSC had assured the NNWSs against the threats which they perceived by laying down in the resolution that "it welcomes the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is the victim of an act or an object of a threat of aggression in which nuclear weapons are used." *Inter alia* resolution also emphasized on the Article 51 of U.N. Charter.

[68]See CRS report of 28 March 2006 {Online: web} Accessed on25 March 2006 URL: http://www.armscontrol.org/projects/india/crs/RL330162.pdf

when the United States has called for all states to strengthen their domestic export control laws and for tighter multilateral controls, U.S. nuclear cooperation with India would require loosening its own nuclear export legislation, as well as creating a Nuclear Suppliers Group exception. It would reverse nearly three decades of U.S. nonproliferation policy and practice towards India. Some believe this agreement undercuts the basic bargain of the NPT, could undermine hard-won restrictions on nuclear supply, and could prompt some suppliers, like China, to justify supplying other states outside the NPT regime, like Pakistan.[69]

However, many counties have the views of their own but majority of countries supporting India. China said the Indo-US deal for civil nuclear cooperation should benefit the global non-proliferation regime. The Chinese were vocal in criticising the Indo-US nuclear deal which they said would "undermine global non-proliferation efforts" but eased their opposition soon after the US Congress endorsed the deal. Chinese foreign ministry spokesman Qin Gang said on 13 December 2006, "we consider the cooperation between countries to use nuclear energy for peaceful purpose will be beneficial in maintaining the principles and effectiveness of international nuclear non-proliferation Chinese Foreign Ministry spokesman Qin Gang said when asked to comment on the US Congress' approval last week of a bill to implement the civil nuclear deal with India.[70]

Indian Prime Minister Manmohan Singh and U.S. President Bush announced a global partnership with India to promote stability, democracy, prosperity and peace. This desire to transform relations with India, according to officials in the U.S. Executive is "founded upon a strategic vision that transcends even today's most pressing security concerns." President Bush said he would "work to achieve full civil nuclear energy cooperation with India" and would "also seek agreement from Congress to adjust U.S. laws and policies."(CRS report: RL 33016, 22 March 2006).

Nonproliferation issue is at the core of the Indo-US relations. No other factor has been more instrumental in causing an estrangement in the relationships

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[69] Ibid

[70] Press Trust of India, quoted by the *Tribune*, 14 December 2006.

between the two countries. Both countries have established intractable positions on their respective view points on nuclear proliferation and are unwilling to make any concessions. The realization of the full potential of Indo-US strategic relations nevertheless hinges upon the successful resolution of these divergent positions. The major divergences that have existed between the two countries on nuclear and missile issues can be traced to India's Peaceful Nuclear Explosions (PNE) in 1974. How and why India was forced into taking this decision needs explanation.[71]

In 1959, India had a notable lead over China in the nuclear field. During the decade of the 50s, above ground nuclear testing took place routinely around the world. But Nehru opposed all weapons of mass destruction. In 1964 when China had exploded its first nuclear device, Dr Homi Bhabha (India's first nuclear scientist) had declared that India could produce the nuclear bomb within 15 months (by early 1967). Options for India were limited i.e. either address the Chinese threat by going nuclear, or persist with global nuclear disarmament and remain non-nuclear and seek international guarantees. At this juncture, Prime Minister Shastri requested the British PM, Mr. Harold Wilson for guarantees of an extended nuclear deterrence but did not receive a favourable response. (George Perkovich 1999:96)

Thus, in spite of the 1962 debacle, the 1964 Chinese nuclear explosions and the British refusal on an extended nuclear deterrence; Shastri did not opt for a nuclear programme. Although therefore, the scientific community was ready for many years to carry out a peaceful nuclear explosion (PNE) it was only in 1974 that the first PNE was authorised by Prime Minister Indira Gandhi, in the face of intimidation by the US in 1971, when the Aircraft carrier "USS Enterprise" was dispatched to the Indian Ocean during the Bangladesh War (Perkovich 1999:120)

The tests by India hastened the establishment of the Nuclear Suppliers Group in 1975 to implement nuclear export controls. The NSG published guidelines[72] in

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[71] National Defense University, National War College *Indo-Us Strategic Relations Moving From Estrangement To Engagement*, Abhay R Karve, faculty seminar leaders- Mr. Robert Kline, Dr Bob Callaghan, Col. Jim Harris for Details see {online: web}accessed 27 June 2007, URL: http://www.ndu.edu/library/n4/n03AKarveIndo-US.pdf.

[72] IAEA Document INFCIRC/254, Guidelines for Transfers of Nuclear-related Dual-use Equipment, Materials, Software, and Related Technology. Part 1 covers "trigger list" items: those especially designed or prepared for nuclear use: (i) nuclear material; (ii) nuclear reactors and equipment; (iii) non-nuclear material for reactors; (iv) plant and equipment for reprocessing,

1978 "to apply to nuclear transfers for peaceful purposes to and the enactment of the US Nuclear Non-Proliferation Act (1978). US policy to persuade India to abandon its nuclear option has varied over the years, ranging from coercing India to join the Nuclear Non Proliferation Treaty (NPT), to accepting 'full scope safeguards' over its entire nuclear programme, to 'capping, rolling back and eliminating' its nuclear capabilities, to joining the Comprehensive Test Ban Treaty (CTBT). None of these achieved any concrete results. In general, US policy can be described as variations of the single over-arching theme of shutting out any aspiring entrant from the nuclear club, and withholding technology and materials that could be used to produce nuclear weapons. Within this broad framework there has been room for play to suit the predilections of the individual Presidents[73].

President Bush has however been different in his approach to this vexed issue. Firstly, the Bush administration is clearly indifferent to the future of either the CTBT or the Fissile Material Cut off Treaty (FMCT). Secondly, it has not insisted that India 'roll back' its nuclear programme although it definitely wants a 'cap' on the deployment on further nuclear weapons. Thirdly, the administration appears to be taking a relaxed view on the technology transfers, especially in regard to safety and ancillary equipment. The US has only made proforma objections to Russia's transfer of two 1000 MW VVER atomic reactors to India. It will also not object to Russia supplying cryogenic engines for India's space related Geo-Stationary Launch Vehicle (GSLV) programme, provided the related technology is not transferred.[74]

Despite the Bush administration being less aggressive in demanding the rolling back, capping and elimination of India's nuclear weapon capability, it has by no means abandoned the effort. On the other hand, of the three nuclear positions that were possible by India i.e. *pragmatic, maximalist, and rejectionist,* the pragmatists

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enrichment and conversion of nuclear material and for fuel fabrication and heavy water production; and (v) associated technology. Part 2 covers dual-use items. Additional NSG criteria for dual-use exports include NPT membership and/or full-scope safeguards agreement; appropriate end-use; whether the technology would be used in a reprocessing or enrichment facility; the state's support for nonproliferation; and the risk of potential nuclear terrorism.

[73] PR Chari, India-US Relations Promoting Synergy_ , Institute of Peace and Conflict Studies, New Delhi , 21 January 2003, 14. {online :web} accessed on 20 Jan 2007 URL: http://www.ipcs.org/US_related_seminars2.jsp?action=showView&kValue=933

[74] See note 71.

seem to have won the day. Pragmatists believe that the tests have enhanced India's international status.[75] They argue for a minimum deterrent, the limited deployment of nuclear weapons, caps on programmes, the de-mating of warhead and delivery systems and the declaration of no-first-use policy. In their opinion the primary threat to India comes from Pakistan and China, but they also believe that a limited capability is needed to deter extra regional powers from meddling in South Asia. They view the nuclear programme as exceptional; autonomous in its technology, superior in its morality (because of self imposed restraints on the development and the deployment of nuclear weapons), and strategically sophisticated.

All these indications show that India's nuclear weaponisation programme will not be rolled back, much less eliminated. At best a cap may be possible, but even that is subject to numerous conditions. The upcoming 123 Agreement will in all its capabilities attempt to insert such provisions. National Security Strategy document clearly acknowledges that the 'differences remain, including over the development of India's nuclear and missile programmes'. At the same time the document expresses hope that 'through a strong partnership with India, we can best address any differences and shape a dynamic future'.[76] A paper by the Institute of National Security Studies (INSS) concluded that the prospect for the roll back of India's nuclear programme is "virtually nil. The United States should realize that rollback is no longer an option". These recommendations prompted the U.S. Government to enter in a bilateral cooperation Agreement with India which could by implication help in the Nonproliferation objectives of the U.S. [77]

In an attempt to examine the nuclear nonproliferation and the impact of the Nuclear Deal there on and analyzing the issues relating to the 123 agreement, some factors are required to be understood. (1) India is still classified technically under US law as a non-nuclear weapon state and therefore the 123 agreement has to conform to the US legislation applicable to NNWS. (2) It is extremely unlikely that

[75] Ibid.

[76] Ibid.

[77] For greater details see {online: web} Accessed on 15 May, 2007, URL: http://www.whitehouse.gov/infocus/energy/.

the US Congress would amend any more laws to accommodate India as a NWS. India is, however, a de facto nuclear weapon state and accepted as one by the United States and the rest of the international community.[78] Therefore, as a responsible nuclear weapon state, it cannot accept any conditions that would have the effect of degrading its nuclear deterrence.

Section 123 of the US Atomic Energy Act (AEA) requires a 123 agreement to include nine conditions. Of these, one has been exempted for India by the Hyde Act passed last year. The India 123 agreement is required to include the other eight - 123 a (1) and a (3) upto a (9). It is yet to be seen whether 123 Agreement could be fashioned with all these considerations.

As regards the non-proliferation safeguards is concerned, the current initiative between the U.S. and India is being considered as an aberration. In other words, as William Potter described, the Indo- U.S. Joint Statement is "one-time detour by the U.S. on the road toward promoting universal adherence to the objectives of the NPT" (Potter 2005: 352). He further says that "some backsliding by both the United States and India is probably inevitable given complaints in both the countries about who has to do what first." Similarly, Neil Joeck states: "US non-proliferation policy has changed over the years to meet new challenges to security. The new partnership with India provides an opportunity to increase global security while adapting to new conditions."[79]

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[78] As Robert G Joseph under secretary for arms control and international security on 2nd November 2005, stated in that SFRC meeting that "We must pursue approaches with respect to India that recognize the reality that it is a growing 21st century power, shares our democratic values, has substantial growing energy needs, and has long possessed nuclear weapons outside NPT and the status quo approaches have not acknowledged these pragmatic considerations, nor have they achieved the positive outcome of progressively integrating India into the International Nuclear Nonproliferation mainstream" see 30 November 2006, URL: http://chennai.usconsulate.gov/prind051103b.html. Also see 15 January 2007, URL: http://www.fas.org/main/content.jsp?formAction=297&contentId=550.

[79] Neil Joeck, *US India 'Global partnership': The impact on Nonproliferation,* See in paper edited by wade L. Huntley and Karthika Sasikumar entitled as *Nuclear cooperation with India New Challenges, New opportunities,* See- {online:web} Accessed on 15 June 2007, URL: http://www.ligi.ubc.ca/admin/Centres/711/Nuclear_Cooperation_with_India.pdf

Conclusion

The present Nuclear Deal between India and the United States has emerged at a time when diverse kinds of issues have been raised in both countries: questions of national security, economic development, energy security, implications of the spread of nuclear technology etc. The policy establishments of both the countries have highlighted many of these issues in relation to the present nuclear deal. International legal issues in relation to the current nuclear deal potentially include the future implications this deal will have on the international commitments of the respective states in relation to nonproliferation regulations.

The nuclear deal as it shaping up has already given birth to four important documents: the Joint Statement of 18th July 2005, the Joint Statement of 2nd March 2006 and the Separation Plan prepared by the Indian Government and the Hyde Act passed by the US Congress. Currently, both the states are negotiating a civil nuclear cooperation agreement, which is more famously known as the 123 Agreement. The Chapter has given particular attention to the role of international bodies such as the IAEA and the NSG, as the bilateral agreement has many international dimensions, especially in relation to the existing regulations of trade in nuclear technology. Since the United States is the leading member of NSG, the political expectation is that it will be able to bring around the other members of the group to the current requirements and suitably adjust its policies and regulations so as to facilitate the Nuclear Deal.

As the process for bringing in the 123 Agreement is still under negotiation, it is too early to predict the exact legal obligations that may potentially emerge. It is however clear that the Government of India will be insist upon adhering to the letter and spirit of the Joint Statement of 18 July 2005. Internationally, we have to see how the NSG adjusts its policies and regulations to facilitate the Deal.

CHAPTER IV

IMPLEMENTATION OF THE DEAL: DOMESTIC LEGAL ISSUES

India and the United States have so far developed their international relations for cooperation in the nuclear sector in conformity with their domestic laws. The domestic legal systems in both the states pertaining to entering into an International Agreement and its adoption and seeking compliance are different, despite both being democratic. There has been a great debate regarding the procedure that exists in both the democracies in relation to adoption of an international agreement.

The power to make treaties or enter into binding agreements with other nations has an international as well as an internal aspect. In International Law, nations are assumed to know where the treaty making power resides, as well as the internal limitations on that power (Willoughby 1928:528).

Treaty making power is one of the four major constituents of Statehood in International Law. The Montevideo Convention on Rights and Duties of States, 1933[1], had brought out four major elements for the recognition of statehood. Article 1 of the Convention lays down the most widely accepted formulation of the criteria of statehood in international law. It notes that the state as an international person should possess the following qualifications:

(a) Permanent population;

(b) Defined territory;

(c) Government; and

(d) Capacity to enter into relations with other states.

Thus, of the four major attributes of statehood, treaty making power, by which states seek to enter into relations with other states, finds such a place in International Law that in the absence thereof, an entity no longer is deemed to possess statehood and thus no longer has the capacity to be recognized by other states as a State under International law. Entering into treaties and agreements with

[1] Signed at Montevideo, 26 December 1933 and Entered into Force, 26 December 1934.

foreign States is one of the attributes of State sovereignty. No State can insulate itself from the rest of the world whether it is in the matter of foreign relations, trade, environment, communications, ecology or finance. This is more true since the end of the World War II. The advent of globalization and steady advances made in communication and information technology have rendered independent States inter-dependent. Every State has entered into and is entering into treaties – be it multilateral or bilateral, which has a serious impact upon the socio-political and economic security of a state. In spite of the fundamental importance of the treaty-making power, it has unfortunately received very little political concern. (Iyer 2003:16)

For the purpose of implementing the Nuclear Deal, both India and the United States are required to sign an Agreement. To give it a binding capacity under international law this has to have the same sense of meaning as is defined under Article 2 of the Vienna convention on Law of Treaties, 1969(VCLT). According to Article 2(a) of VCLT meaning of a Treaty is given as follows:

> "treaty means an International Agreement concluded between states in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation"

Thus Starke,[1] (who goes beyond the VCLT's focus on written document) notes that "so long as an agreement between states is attested, provided, it is not one governed by domestic national law, and provided that it is intended to create legal relationship, any kind of instrument or document, or any oral exchange between states involving undertakings may constitute a treaty, irrespective of the form or circumstances of its conclusion".

For the practical purposes it is possible to divide treaties into "law making" treaties, which are intended to have universal or general relevance, and "treaty-

[1] Introduction to International Law p-413, IXth edition, London: Butterworth.

contracts", which apply only as between two or, a small number of states[2] . Such a distinction as according to Malcolm N. Shaw[3] (2003) is intended to reflect the general or local applicability of a particular treaty and range of obligations imposed. It cannot be regarded as hard and fast and there are many areas according to him which are overlapping and are uncertain. In order to understand the mode of domestic implementation of international obligations it is pertinent to analyse the domestic procedures involved in both the States.

A. U.S. Domestic Procedure

The Constitution of the United States is a terse document, smallest in the world; it consists of seven articles - four of which refer to the treaty making power.[4]

(1) Article I vests all legislative powers in a Congress; section 10 of that Article prohibits any state i.e. subunits of U.S., from entering into a "treaty, alliance, or confederation."

(2) Article II vests the executive power in a President. Sections 2 and 3 assign certain powers to the President, including the "power, by and with the advice and consent of the Senate, to make treaties, provided two-thirds of the Senators present concur."

(3) Article III vests the judicial power of the United States in the courts; section 2 provides "the judicial power shall extend to all cases. . . arising under. . . treaties made, or which shall be made" under the authority of the United States.

(4) Article VI , paragraph 2, known as the supremacy clause, provides "all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby.. "

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[2] Malcom N.Shaw (2003) *International Law*, p-88, vth edition, Cambridge University Press, London.

[3] ibid

[4] Robert L. Maddex, 2002 , "The U.S Constitution : A to Z", CQ press, Washington

The treaty-making power in the U.S. is the political power of the government. The constitutional provision on it mentions under Article II section 2 and Para 2 that President shall have the power 'by and with the consent of the Senate, to make treaties, provided two-thirds of the senators concur' Thus the house providing equal representatives from all states has more power regarding adoption of International treaty or an agreement.[5]

Nearly 60 years ago, John Foster Dulles, Secretary of State under President Dwight Eisenhower, asserted that "treaty law can override the Constitution. Treaties, for example ... can cut across the rights given to the people by their constitutional Bill of Rights."[6] Leaving aside the fact that the Constitution and Bill of Rights *protect* rights, rather than *grant* them, this is said to be Dulles' calculated understanding of the treaty law of United States.[7]

The President initiates and conducts negotiations of the treaties and after signing them, he is required under Article 2 Section 2 to place the text before Senate. Article II, Section 2 of the U.S. Constitution, which deals with the powers of the President, states, *inter alia*, that the President is empowered "by and with the advice and consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur"

In the United States the two well-known instances in which Senate refused to approve the treaty signed by the President are (1) the Treaty of Versailles concluded at the end of World War I and, (2) CTBT on the testing of nuclear weapons. President Woodrow Wilson, who was indeed the moving spirit behind the Versailles treaty, signed the treaty together with allied nations but when it was presented to the Senate, it was rejected, thus in effect withdrawing U.S. from European affairs for a long time until the coming of Nazism in Germany. Even the CTBT which was carried forward by President Clinton and his predecessors met with similar fate. In view of this constitutional position, a practice has been developed in that country according to which, the Senators i.e. important persons

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[5] Hugh Evander Willis, 1936, Constitutional Law of United States, principia press, p-427

[6] George C. Detweiler (2000), *Treaties and Constitution,* {online: web} Accessed on 15 march,2007, URL: http://www.unwatch.com/treaties.html

[7] Ibid

among them, are associated with treaty making from the very beginning so that it may be easier for the President to get the treaty ratified later by the Senate (NCRWC consultation paper 2001).

In the United States, a distinction is drawn between treaties and agreements. So far as the treaties are concerned, they are required by the Constitution to be submitted to Senate for approval. But, so far as the agreements and particularly, those that are known as Executive agreements, are concerned, they are entered into and signed by the President in exercise of his Executive power, since such agreements in U.S are not considered treaties. The types of agreements so contemplated are those relating to foreign relations and military matters which do not affect the rights and obligations of the citizens. In so far as the trade agreements are concerned, a different procedure is evolved. Since the Congress has been given constitutional authority to regulate commerce with foreign nations under Article 1 of the Constitution, such treaties are subject to ratification by both Houses but only by a simple majority and they are known as congressional-executive Agreements (NCRWC Consultation paper 2001).

There has been some dispute as to whether the treaty power is an executive power or combined executive and legislative power. Some presidents have acted on the theory that the framing of treaties is purely an executive function, and that the function of Senate is merely that of ratifying or rejecting a treaty presented to it by the President. This, however, is probably not the correct constitutional view. In the constitutional Convention, there was some difference of opinion as to whether the treaty power should be vested in Congress as under the Articles of Confederation, or in the President, or in the Senate, or in the President and the Senate. The later view finally prevailed.[8]

It is submitted here that International Law leaves no ground for an international Agreement under Article 2 to go out of scope of the application of VCLT, as it clearly says that "whatever its particular designation". Thus domestically in the U.S. law it may not carry that weight but internationally it has the same weigh at treaty does.

[8] Hugh Evander Willis, Constitutional Law of the United States, 1936, Principia Press, p-428.

Article VI Section 2 of the Constitution which relates to the effect of the treaties, expressly provides as aforesaid that "All treaties made or which shall be made with the authority of the United States, shall be the supreme law of the land and the judges in every state shall be bound thereby, anything in the Constitution or Laws of any state to the contrary notwithstanding." This is a fundamental departure from the British practice. Thus what Dulles said 60 years before appears to be true.[9] The treaty not only overrides any federal law of the country but also overriding power is given to any provision in the Constitution of the State or the laws made by any State Congresses to the contrary (NCRWC Consultation paper 2001).

The American system of Government is such that executive-legislative relationships tend to be negative and often of an adversary nature. Either of them can frustrate the other, and it is very difficult for either to control the other. The President, as chief executive, can negotiate a treaty, but he certainly can not compel the senate to give its advice and consent to ratification unless, such an Agreement is sought to be made an executive Agreement. The life of which does not run beyond the time of the existence of that executive in power unless otherwise carried on by the subsequent Executive.

The Senate can pass a resolution advising the President to make a treaty, but it cannot compel him to do so. The President can ask Congress for authority or funds to carry out a given programme, but he cannot compel Congress to provide them. The Congress can give the President the authority or funds which he has not requested, but it can not compel him to use them (Wilcox1971:16). But, even while under the Executive mandate President can, in its tenure do, what Congress would or would not authorize him to do.

The constitution of U.S. posits three major roles for Congress. (1) Through its action with respect to legislation (2) Through its powers of purse and (3) Through the Senate's action on treaties and nominations. An important part of the power struggle between Congress and the Executive branch has to do with the kind of actions the executive can take in the absence of legislative authority, and with

[9] See note 8.

the type of international agreements the President can make without Senate approval. These are essentially arguments involving different interpretations of the constitution. They have waxed and waned since 1789, depending in part on who occupied the White House and they will continue to do so because they are not susceptible to judicial settlement or to precise definition (Francis O. Wilcox-1971:10).

A major shift in foreign policy like the Indo–US Nuclear Deal also requires Congressional approval. Hence, the Executive firstly sought to save itself from the existing law that requires IAEA safeguards on all Nuclear Facilities. Thus finally Hyde Act came into existence to save the democratic ethos of the people of America.

In any democratic society the representative of the people hold the supreme power. In India it is Lok Sabha & Rajya Sabha. To make governance easy, the majority party in the Lok Sabha appoints a few of the elected representatives to run the government i.e. the Cabinet with Prime Minister as its head.[10] The Cabinet has sufficient power to approve a major internal or external policy shift. For example the Cabinet headed by the Prime Minister Manmohan Singh can approve the Indo – US Nuclear Deal. He has to table the same in the Parliament either prior and in some cases after the Cabinet approves the deal. Cabinet votes on the deal, before it sends it to the President. Tabling of an Agreement like the above Deal in the Parliament is though necessary means to get people behind the measure, is not mandatory requirement. It allows the representatives of the people to share their views.

The above does not happen in the US. The presidential system of governance does not vest that much authority to the Cabinet. Reason being all the Cabinet members are appointees and not elected. Hence other than the President and the Vice President who are elected, everybody else in the Cabinet is an appointee. Congress appoints them at the request of the President. The Cabinet itself has a limited power i.e. it cannot approve a major policy shift. In addition all money appropriation has to first go to the Congress. If approved, then only the Executive

[10] Constitution of India, Article 74.

Branch is allowed to spend it. This is a fine check and balance. But it is also a major impediment to implement any policy change.

At many times the Agreements have not been approved by the Congress, leaving the executive branch embarrassed. To cite a recent case, as an example, the Dubai Port Management Deal in March 2006. This deal, although approved by the Executive Branch had trouble passing through the Congressional scrutiny. Congress did not pass it. Executive was faced with an embarrassment. The Dubai Company finally withdrew the take over offer[11].

Nonproliferation Treaty (NPT) proponents and current opposition to the above deal have failed to convince the Bush Administration to renege the Bush – Manmohan Statement of July 2005. After the deal was finally signed in New Delhi in March 2006, the NPT Lobby shifted its effort to convince the Congress to revoke the deal. But, it failed to do so and finally US Congress passed the Act entitled "Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006"[12]. This act paved the way forward for the U.S. government to enter into an International Agreement with India on the matter of Atomic Energy Cooperation for the peaceful purposes (as discussed in the chapter III).

Before the bill becomes a law, which the Indo –US Nuclear Deal will ultimately become (in fact it is an amendment to an existing law), it has to complete the full process of hearings and debate yet again and voting on the Senate Floor, as the Hyde Act does not authorize the President by its passage to go for an executable agreement without the Congressional consent. The bill could be passed by unanimous consent or by a division vote.[13] This process is duly recorded. If the bill is passed by the Senate, it is delivered to House of Representative. The House of Representative could pass the bill as it is or offer its own amendments and then pass the bill. Later the bill and all amendments are delivered back to the Senate. The Senate may agree with the amendments and vote on them or send it back to the Congress for reconsideration.

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[11] See on the online: web accessed on 11 June,2007 URL: http://www.jihadwatch.org/archives/010539.php.

[12] H.R. 5682,Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006.

[13] The present Act was passed by congress on 16 December2006 and then ratified by President Bush on 18 December 2006. U.S. House of Representative passed it on July 26,2006 with 311-112 with 9 abstentions senate passed it on 16 November with 85-12 margin.

In rare cases the Senate and the House of Representatives may pass two version of the same bill as it happened in the present India–United States Atomic Energy Cooperation Agreement. A joint committee of the Senate and the House of Representative then reconciled the two versions. Ultimately the President signed the bill and then only it became a law.

B. Indian domestic procedure:

Indian Domestic law for entering into an Agreement of the kind as defined under Article 2 of the Vienna Convention on Law of Treaties is contained under two Articles of the Constitution of India, *viz*-Article 73 and Article 253. These two Articles provide powers to the Executive and the Legislature respectively.
Article 73 lays down the extent of executive power of the Union. Accordingly –

(1) Subject to the Provisions of this Constitution, the executive power of the Union shall extend-
    (a) to the matters with respect to which Parliament has power to make laws; and
    (b) To the exercise of such rights, authority and jurisdiction as are exercisable by the government of India by virtue of any treaty or agreement.

It is to be noted that this article provides a parallel power to the executive as are provided to the Union Legislature. For that purpose we are required to look into Article 253 of the constitution as well. This article is contained in the part XI of the Indian Constitution which begins with the "Relations between the Union and the States" with the chapter heading 'Legislative Relations".
This Article provide as follows-
"Legislation for giving effect to International agreements-

Notwithstanding anything in the foregoing provisions of this Chapter, Parliament has power to make law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at any international conference, association or other body."

This article is to be read with Entry 10 and Entry 14 of the Union List provided under the Schedule VII. Entry 10 concerns "Foreign affairs; all matters which bring the union into any relation with any foreign country". Similarly Entry 14 deals with "Entering into treaties and agreements with foreign countries and implementing of treaties, agreements and conventions with foreign countries".

Indian legal system provides parallel powers to both the Executive and the Legislature under Article 73 and 253 respectively as mentioned before. However Treaty jurisdiction is subject to constitutional limitations and, therefore, regarding the GATT, WTO or any other treaty, the Union has no totalitarian power. Article 73 extends Union executive such power to 'such rights', authority and jurisdiction as are exercisable by the Central Government "under any treaty or agreement". This is vague vagarious and liable to be abused.[14]

Under the Indian legal system, executive has powers to enter into any treaty, agreement, or convention with any state or with any international organization as per Article 253 of the Constitution, read with Entry10 and Entry 14 respectively and in India the law is as Shaw J, laid down in Maganbhai Ishwarbhai Patel v. Union of India,[15] that "our Constitution did not make the power to enter into a treaty, whether in peace or in war, conditional on passing legislation. Under Article-73 the executive power of the union of India was co-extensive with the legislative power of parliament, and the power to legislate in respect of treaties was conferred on parliament by entries 10 and 14, List 1, Schedule 7 therefore, the Executive might incur obligations by entering into treaties"[16] which may be in the name of statement also as in the present case but "if such obligation did not restrict the rights of citizens or others, or modify the laws of the state, no legislation was necessary; but if such obligation did affect such rights or modify such laws, legislation would be necessary"[17] (Seervai: 1991).

The Indian Constitution has murky treaty provision, which should have received the serious attention of the Commission to Review the working of the Constitution (Iyer: 2003). Thus, the Treaty implementing power in India overrides

[14] V.R.Krishna Iyer 2003, Constitutional Miscellany, p 11, Eastern Book Company, Lucknow

[15] A.I.R 1969 SC 783.

[16] Ibid.

[17] Ibid.

the normal federal-state jurisdictional lines. In the absence of such provisions, the centre's capacity in the International field would have been greatly impaired, as it could not then pursue a strong and effective foreign policy. This gives an additional dimension to the centre's power over external affairs, which are much broader than that existing in any other federation. Thus, it is not necessary to enact a law for implementing each and every treaty (M.P.Jain-2003).

In a normal situation, there are three stages involved in the treaty-making process - negotiation, signature and ratification. No doubt the initial step of negotiation is done by the executive. This diplomatic operation is too delicate, flexible and unstable for parliamentary intervention. Nevertheless, in dealings of great moment or polemical potential, to make available an opportunity for public discussion before the Cabinet makes even a tentative commitment is democratic decency, even necessity. The signature stage must be preceded by broad, popular, political consensus. More than mere ministerial signature should be necessary to make it a binding treaty. But signature does go a long way in obligating the signing member-state from doing anything that frustrates the substance of the treaty before formal ratification."

Article 18 of the Vienna Convention on the Law of Treaties, 1969, lays down this proposition[18]. A signature in excess of the powers of the plenipotentiary may be challenged as being *ultra vires*. However, the ratification of the treaty sets the seal of finality on the deed and so is a grave step where democratic authority must be sought from the nation's highest instrumentality.

Thus, we can understand that in terms of our constitutional design, the treaty-making power appears to be an executive power. It is so in our Constitution because:

(1) Prior parliamentary sanction is not required for executive signing any treaty.

(2) Parliamentary legislation is required *pro facto* for implementing a treaty.

It can be then seen that the executive can very well present the parliament with a *fait accompli* and constrain its options by the argument that treaty is already signed

[18] See Vienna Convention on Law of Treaties.

and the Union of India can not go back on the commitments already made to a foreign government. On the face of it, it appears to be a historical hangover of the imperialist British tradition which is a mixture of royal executive prerogative as well undemocratic colonial heritage (Saxena: 2007). On part of the Legal Scholars there is a continuous demand that the treaties made by the Union Executive should be subject to ratification by the Parliament and Supreme Court should watch them if they are in conformity with the basic structure of the Constitution.[19]

Under Indian Constitution the Executive can not *ipse dixit* bypass the people's will or voice as it would defeat the principles of transparency and accountability of a democracy and endanger the sovereignty of Parliament by elected few (Iyer: 2002). Ratification, therefore, has received procedural sanctity and legal solemnity in the constitutions of many countries, including the United States and South Africa, with which many provisions of our Constitution resemble. The Indian Constitution vests in Parliament the power to enact treaty-making legislation but, in the absence of such a law, the executive exercises this power, which may inflict "incalculable injury on the citizenry or barter precious national values at the whim of a transient Cabinet"(Iyer: 2002).

C. A comparison between India and the U.S.

The treaty-making power under our Constitution has been given to the Executive under Article-73. Article 246(1) read with Entry 14 of List-I Union List of the Seventh Schedule empowers Parliament to make laws with respect to "Entering into treaties and agreements with foreign countries and implementation of treaties, agreements and conventions with foreign countries". Article-253 gives powers to Parliament to make laws for the whole or any part of the country for implementing any treaty, agreement or convention. Article 253 has, thus been given an overriding power. Empowered by Article-73, an Executive, without any debate in the Parliament or assent of the people in any discernible way, can commit itself and surrender people's basic and fundamental rights and thus bind the country to enact legislations, which go against the basic principles of our Constitution and aspirations of the people.

[19] Krishna Iyer, 2003, op cit, p 13

In contrast to this process, in the US Constitution, the President has been given power to make treaties by and with the advice and consent of the Senate provided two-thirds of the Senators present concur (vide Article-II (2). By referring to an example, it may also be pointed out that US has made it clear that none of the decisions of WTO, which are contrary to their law and Constitution, will be binding on the American people. Section 102(a) of Uruguay Round Agreement Act reads as: "Section 102(a) (a) Relationship of Agreements to United States Law: (1) U.S. Law to Prevail in Conflict: No provision of any of the Uruguay Round Agreements nor the application of any such provision to any person or circumstance, that is inconsistent with any law of the United States shall have effect."

America has thus, fully protected its sovereignty and the rights of its people. Even in the Constitutions of other countries, namely, in South Africa, Republic of Korea, the Philippines and so on, we find provisions similar to US where the treaty becomes binding only after it is cleared by the majority of People's Representatives in the Senate or Assembly or Parliament, as the case may be.

Conclusion

Thus we see how, the two organs of the Government i.e. the Executive and the Legislature coordinate with each other for the Treaty-making process in both the States. It is submitted here that the Treaty-making power in both the States gives importance to the Executive but more importance is given to the Executive in India than what is given in the United States. In the U.S. an executive Agreement runs only up to the life of the Executive in power but in India it is not necessarily so. The present Nuclear Deal will conclude only after India and the U.S. sign the so called 123 Agreement. It is required to be ratified by the U.S. President after the Congressional approval. As for India, once the Government enters into that Agreement it *ipso facto* becomes binding law for the people of India.

political fulcrum is on the extent of threat faced by the country through intrusive inspection regimes and its implications for the nation's sovereignty and independent development of nuclear technology in the future. The legal consequences that may follow from the nuclear deal came to be extensively discussed in the Indian academic and media circles. The issues that have a bearing on the legal consequences *inter alia* are the right to reprocess for India, right to return for U.S., and the circumstances of India's compulsion to go for the detonation of a device. India does not at any cost want to leave open her feet on a slippery ground. It seems that U.S. has in legal language conceded all Indian demands.

The right to reprocessing is at the heart of India's more than sixty year old nuclear energy programme and the country cannot afford to lose sight thereof under any circumstances. It is then understandable that the Indian Government is unwilling to conclude the 123 Agreement without this right in place as it forms the backbone of India's nuclear energy programme. India has been reprocessing nuclear fuel on its own for the last forty years. In the 1963 Agreement, India had this right subject to 'Joint determination' which India could never materialize in relation to the Tarapore plant. Given this historical experience, India has now rightly insisted on 'prior consent' for reprocessing. However, it has conceded to the legitimate safeguard of this right by agreeing to do so with reference to certain parameters.

In relation to United States' right to demand the return of the equipment, fuel and the material it has supplied is concerned, it was very much the part of 1963 Agreement under Article VI D and Article VIII C and also, it is going to form the part of the present "123 Agreement" as well. However, the exercise of this right has been qualified by a U.S. Commitment to ensure the continuous operation of reactors supplied by it and apart from it U.S. will leave India free to arrange appropriate fuel supplies from other sources.

Among other International issues are IAEA and NSG's role in the Nuclear Deal. IAEA was created in the year 1957, whose objective is to accelerate and enlarge the contribution of atomic energy to peace, health, and prosperity throughout the world and to ensure that the assistance provided by it or at its request or under its supervision or control does not result in furthering any military

purpose. Apart from it, the NSG contributes to the nonproliferation of nuclear weapons through the implementation of two sets of Guidelines for nuclear exports and nuclear-related exports which also have been examined in this study. How far both the bodies play their role in coordination of peaceful nuclear activities at the international plane and what is their legal status in the International law and how are these bodies involved in the deal as per the Joint Statement is also discussed in detail.

There are many other issues that have been raised in the discussion of the current Nuclear Deal. Among such issues are- the kind of agreement which would be entered into between these two States, and also the issue of its implementation, which have been part of discussion in Chapter IV. The *modus operandi* in both the states, pertaining to the adoption and implementation of a Treaty or an International Agreement, is different. In the U.S., as has been discussed, that no Deal is possible without the approval of the Senate. Though, the deal could be through an executive action but on such serious issues the public opinion is required to be taken and hence it is attempted to be brought through the express voice of the American people by adopting legislation rather than enacting it through executive agreement or through executive bereft of an enactment.

In India, the law on the treaty making is through executive action; it is their prerogative. There is a debate on the treaty making powers as provided in the Constitution. Some voices are raised to the extent that parliament should be required to make law for bringing into force the 123 Agreement which is to be concluded between the parties. In the United States, it is yet to go before the Congress as the Hyde Act passed by it kept with itself the right to bring the 123 Agreement again before it after its successful negotiation between the two states.

In order to make successful completion of the Nuclear Cooperation Agreement, both India and U.S. should try to keep their domestic law terminologies out of a negotiation in discussing the International Legal issues. The use of words such as "Deal" should be avoided, as the agreement negotiated shall *finally* be having the force of Treaty. However, it is for the sake of the reflecting the *present* reality of the bilateral *arrangement* that the word Deal has been used as the title itself instead of an Agreement or Treaty.

To sum up, this study proposes to assert that the energy needs on the one hand and the nonproliferation objectives of the international community on the

other should not be interwoven to deprive the States of their right to development as understandable from the Article 55 and 56 of the U.N. Charter. A treaty on nonproliferation of nuclear weapons is not an end in itself but a means to an end, i.e. the elimination of the nuclear weapons. The responsible members of International community, as India and the United States are, should go hand in hand. This can be done without jeopardizing the future of the present or the future generations by means of the nuclear weapons or the weapons of mass destruction. The present nuclear deal is an attempt by these two democracies to help utilize all the resources available before them. The changing perception of the U.S. administration about India's capabilities, and its desire for both states to work together for the maintenance of peace, security, and economic growth, has allowed India and the United States to move in the right direction for a better future.

ANNEXURES

ANNEXURE I

GOVERNMENT OF INDIA AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA ON THE CIVIL USES OF ATOMIC ENERGY

Washington, 8 August 1963

WHEREAS the peaceful uses of atomic energy hold great promise for all mankind:

WHEREAS the Government of India has decided to construct and operate a civil atomic power station near Tarapur in Maharashtra State as hereinafter specified:

WHEREAS the Government of the United States of America and the Government of India desire to co-operate with respect to the construction and operation of the aforesaid civil atomic power station

Now THEREFORE the Parties hereto agree as follows

Article I

Unclassified information shall be exchanged between the Parties hereto with respect to the development, design, construction, operation, and use of the Tarapur Atomic Power Station, including research and development related thereto and problems of health and safety connected therewith.

Article II

A. During the period of this Agreement the United States Commission will sell to the Government of India and the Government of India will purchase from the United States Commission, as needed, all requirements of the Government of India for enriched uranium for use as fuel at the Tarapur Atomic Power Station, it being understood that the Tarapur Atomic Power Station shall be operated on no other special nuclear material than that made available by the United States commission and special nuclear material produced therefrom. The enriched uranium, which shall contain no more than twenty per cent (20 per cent) U-235, will be made available in accordance with the terms conditions and delivery schedules set forth in a contract to be made between the Parties; provided, however, that the net amount of U-235 contained in the enriched uranium sold hereunder shall not exceed 14500 kilograms. The net amount of U-235 shall be the gross quantity of U-235 contained in the enriched uranium sold to the Government of India hereunder less the quantity of U-235 contained in recoverable uranium resold or otherwise returned to the Government of the United States of America or transferred to any other nation or group of nations or international organisation with the approval of the Government of the United States of America.

B. The net amount of U-235 contained in the enriched uranium to be sold pursuant to Paragraph A of this article has been agreed upon by the Parties on the basis of estimated requirements for fuelling the Tarapur Atomic Power Station. If the construction of the Tarapur Atomic Power Station is not begun by June 30, 1965, the United States shall not be required, unless it is otherwise agreed, to sell enriched uranium for fuelling the Tarapur Station under this Agreement.

C. Within the limitations contained in Paragraph A of this Article the quantity of enriched uranium sold by the United States Commission under this Article and held by the Government of India pursuant to this Agreement shall not at any time be in excess of the quantity necessary for the full loading of the Tarapur Atomic Power Station plus such additional quantity as, in the opinion of the Parties, is necessary to permit the efficient and continuous operation of the Station.

D. The Government of India will retain title to any enriched uranium purchased from the United States Commission.

E. It is agreed that when any special nuclear material utilized in the Tarapur Atomic Power Station requires reprocessing, and recourse is not taken by the Government of India to the provisions of Article VI C of this Agreement, such reprocessing may be performed in Indian facilities upon a joint determination of the Parties that the provisions of Article VI of this Agreement may be effectively applied, or in such other facilities as may be mutually agreed. It is understood, except as may be otherwise agreed, that the form and content of any irradiated fuel elements recovered from the reactors shall not be altered before delivery to any such reprocessing facility.

F. With respect to any special nuclear material produced in the Tarapur Atomic Power Station which is in excess of the need of the Government of India for such material in its program for the peaceful uses of atomic energy, the Government of the United States of America shall have the first option to purchase such special nuclear material at the fuel value price of the United States Commission which may be in effect domestically -at such time as it may exercise its option. If such option is not exercised, the Government of India may with the approval of the Government of the United States of America transfer such excess special nuclear material to any other nation or group of nations of international organization.

G. Some atomic energy materials which the Government of India may request the United States Commission to provide in accordance with this Agreement are harmful to persons and property unless handled and used carefully. After delivery of such materials to the Government of India, the Government of India shall bear all responsibility, insofar as the Government of the United States of America is concerned, for the safe handling and use of such materials.

Article III

Materials needed for use at or in connection with the Tarapur Atomic Power Station, other than source materials or the special nuclear materials required for fuelling the reactors, will, when such materials are not available commercially, be transferred by the Government of the United States of America to the Government of India on such terms and conditions and in such amounts as may be mutually agreed; provided, however, that special nuclear material transfers will be confined to limited quantities.

Article IV

The application or use of any information (including design drawings and specifications) and any material, equipment and devices exchanged or transferred under this Agreement, shall be the responsibility of the Party receiving it, and the other Party does not warrant the accuracy or completeness of such information and does not warrant the suitability of such information, materials equipment and devices for any particular use or application.

Article V

It is agreed that the Government of the United States of America will permit persons under its jurisdiction to transfer and export materials, equipment and devices, other than source or special nuclear materials, to, and perform services for, the Government of India and such persons under its jurisdiction as are authorized by the Government of India to receive and possess such materials, equipment and devices, and utilize such services for the Tarapur Atomic Power Station, subject to applicable laws, regulations and Hence requirements of the Government of the United States of America and the Government of India.

Article VI

A. The Parties to this Agreement emphasize their common interest in assuring that any material, equipment or device made available to the Government of India for use in the Tarapur Atomic PowerStation, or in connection therewith, pursuant to this Agreement shall be used solely for peaceful purposes. The Government of India emphasizes, in contrast to the positions of the United States, that its Agreement to the provisions of this Article in relation to equipment or devices transferred pursuant to this Agreement has been accorded in consideration of the fact that, as provided in this Agreement, the Tarapur Atomic Power Station will be operated on no other special nuclear material than that furnished by the Government of the United States of America and special nuclear material produced there from, in consequence of which the provisions of this Article in relation to equipment or devices in any case ensue from the safeguards on fuel.

B. The following arrangements shall be applicable between the Parties:

1. The Parties have reviewed the design of the Tarapur Atomic Power Station and may review any significant modification in this design for the sole purpose of determining that the arrangements provided in this Article can be effectively applied. For the same purpose, the Parties may review the design of other facilities which will use, fabricate or process any special nuclear material made available pursuant to this Agreement or produced in the Tarapur Atomic Power Station. Such a review of the design of these other facilities will not be required if the Government of India, pursuant to mutually acceptable measurement arrangements, has placed an agreed equivalent amount of the same type of special nuclear material under the scope of this Agreement.

2. The Parties have agreed that a system of records and reports shall be established to assure the complete accountability of any special nuclear material which is made available to the Government of India pursuant to this Agreement or which is produced in the Tarapur Atomic Power Station. This system of records and reports shall be as described in the schedule annexed hereto and marked Annexure A.

3. Any special nuclear material made available pursuant to this Agreement or produced in the Tarapur Atomic Power Station, which is surplus to the current needs of the fuel cycle for the Tarapur Atomic Power Station and which is not transferred by the Government of India pursuant to this Agreement, shall, unless otherwise mutually agreed, be stored at the Tarapur Atomic Power Station.

4. There OR be consultations and periodic exchanges of visits between the Parties to give assurance that the objectives set forth in paragraph A of this Article and the provisions of this Agreement concerning transfers are being observed. To the extent relevant to the accomplishment thereof, personnel designated by the Government of the United States of America, following consultation with the Government of India, upon request of the Government of the United States of America, and personnel designated by the Government of India shall have full access to the Tarapur Atomic Power Station and to conversion, fabrication and chemical processing facilities in India at such time as special nuclear material transferred to the Government of India for, or received from, the Tarapur Atomic Power Station is located at such facilities and at such other times as may be relevant to the accomplishment of the above-noted objectives. Personnel so designated shall also be afforded access to other places and data, and to persons, to the extent relevant to the accomplishment of those objectives. The personnel designated by either Party, accompanied by personnel of the other Party if the latter so requests, may make such independent measurements as either Party considers necessary; and nothing in this Agreement is intended to impede the ability of either Party to have prompt access to data, places and persons to the extent relevant to accomplish the above-noted objectives. The Government of the United States of America will keep such access to a minimum consistent with the need for effective verification that those objectives are being observed.

C. Notwithstanding anything contained in this Agreement the Government of India shall have the right, upon prior notice to the Government of the United States, to remove from the scope of this Agreement quantities of special nuclear material provided it has, pursuant to mutually acceptable measurement arrangements, placed agreed equivalent quantities of the same type of special nuclear material under the scope of this Agreement.

D. In the event of non-compliance with the guarantees or with the provisions of I this Article, and the subsequent failure of the Government of India to fulfill such guarantees and provisions within a reasonable time, the Government of the United States of America shall have the right to suspend or terminate this Agreement and require the return of any equipment and devices transferred under this Agreement and any special nuclear material safeguarded pursuant to this Article.

Article VII

A. The Government of India guarantees that the safeguards in Article VI shall be maintained and that:

1. No, material, equipment or device transferred to the Government of India or authorized persons under its jurisdiction pursuant to this Agreement, by sale, lease or otherwise, will be used for atomic weapons or for research on or development of atomic weapons or for any other military purpose, and

2. That no such material, equipment or device will be transferred to unauthorized persons or beyond the jurisdiction of the Government of India except as may be agreed to by the Government of the United States of America and the Government of India, and then only if in the opinion of the United States Commission such transfer falls within the scope of an Agreement for Cooperation between the Government of the United States of America and the other nation or group of nations or international organization.

B. The Government of the United States of America guarantees that no special nuclear material produced at the Tarapur Atomic Power Station and acquired by it, or an equivalent amount of the same type substituted therefor, shall be used for atomic weapons or for research on or development of atomic weapons or for any other military purpose.

Article VIII

A. Recognizing the desirability of making use of the facilities and services of the International Atomic Energy Agency, the Parties, agree in principle that, at a suitable time, the Agency will be requested to enter into a trilateral agreement for the implementation of the safeguards provisions of Article VI, in accordance with the following paragraphs. In addition, in accordance with the objectives set forth in the Statute of the International Atomic Energy Agency, the Government of the United States of America is prepared, in principle, to include appropriate provisions in the aforementioned trilateral agreement, for the application of Agency safeguards to such special nuclear material produced in the Tarapur Atomic Power Station as may be received in the United States, or the equivalent material substituted therefor.

B. After the Agency has adopted a system of safeguards for reactors of the size of those of the Tarapur Atomic Power Station and at a reasonable time to be mutually agreed upon, the Parties will consult with each other to determine whether the system so adopted is generally consistent with the safeguards provisions contained in Article VI. If the system is generally consistent with these provisions, the Parties will request the Agency to enter into a trilateral agreement as referred to in the preceding paragraph. While the Parties recognize that the trilateral agreement should be implemented as soon as practicable, it is agreed, in order to avoid any dislocation or

uncertainty during the period of early operation of the Tarapur Atomic Power Station, that the Government of India may specify that the agreement shall not be implemented until the Station has reached reliable full-power operation.

C. In the event the Parties do not reach a mutually satisfactory agreement on the terms of the trilateral arrangement envisaged in this Article, paragraph A, either Party may, by notification, terminate this bilateral agreement. Before either Party takes steps to terminate, the Parties will carefully consider the economic effect of any such termination. Neither Party will invoke its termination rights until the other Party has been given sufficient advance notice to permit arrangements by the Government of India, if it is the other Party, for an alternative source of power and to permit adjustment by the Government of the United States of America, if it is the other Party of production schedules. The Government of the United States of America will not invoke its termination rights unless there has been widespread acceptance, by those nations with whom it has bilateral agreements, of the implementation of safeguards by the Agency or of provisions similar to those contained in this Agreement. In the event of termination by either Party, the Government of India shall, at the request of the Government of the United States of America, return to the Government of the United States of America all special nuclear material received pursuant to this Agreement and in its possession or in the possession of persons under its jurisdiction. The Government of the United States of America will compensate the Government of India for such returned material at the current schedule of prices then in effect domestically.

Article IX

For the purposes of this Agreement

(a) "United States Commission" means the United States Atomic Energy Commission.

(b) "Tarapur Atomic Power Station" means an electrical generating power plant consisting of two boiling water reactors and associated equipment with a combined net output of approximately 380 We, to be located near Tarapur, Maharashtra State, India.

(c) "Equipment and devices" and "equipment or device" means any instrument, apparatus, or facility and includes any facility, except an atomic weapon, capable of making use of or producing special nuclear material, and component parts thereof.

(d) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency, or government corporation, but does not include the Parties to this Agreement.

(e) "Reactor" means an apparatus, other than an atomic weapon, in which a self-supporting fission chain reaction is maintained by utilizing uranium, plutonium, or thorium.

(f) "Atomic weapon" means any device utilizing atomic energy, exclusive of the means for transporting or propelling the device (where such means is a separable and divisible part of the device), the principal purpose of which is for use as, or for development of, a weapon, a weapon prototype, or a weapon test device.

(g) "Special nuclear material" means (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235 and any other material which the United States Commission pursuant to the United States Atomic Energy Act determines to be special nuclear material; or (2) any material artificiall~ enriched by any of the foregoing.

(h) "Source material" means (1) uranium, thorium or any other material which is determined by either Party to be source material; or (2) ores containing one or more of the foregoing materials in such concentration as either Party may determine from time to time.

(i) "Parties" means the Government of the United States of America and the Government of India, including the United States Commission on behalf of the Government of the United States of America. "Party" means one of the above mentioned "Parties".

(j) "Reliable full power operation" shall be deemed to have been reached one year after the Tarapur Atomic Power Station has first operated continuously for one hundred hours at full power. In computing this one year period, periods during which either reactor is not in operation for more than four consecutive weeks will be excluded.

Article X

This Agreement shall enter into force on the date on which both Governments have notified each other of compliance with all statutory and constitutional requirements for entry into force of such Agreement and shall remain in force for a period of thirty (30) years.

IN WITNESS WHEREOF, the undersigned, duly authorised have signed this Agreement.

DONE at Washington, in duplicate, this Eighth day of August, 1963.

For the Government of United States of America:

Sd1-

PHILLIPS TALBOT
GLENN T. SEABORG

For the Government of India:

Sdl-

BRAJ KUMAR NEHRU
ANMEJAME A

The Parties have agreed that the system of records and reports for the Tarapur Atomic Power Station will consist of the following elements:

A. With respect to records, information covering the following will be included:

1. receipts of all nuclear materials,

2. internal movements of all nuclear materials,

3. any removal of nuclear materials, including shipments, known losses, and unaccounted for quantities,

4. inventories of all nuclear materials on hand at the end of each accounting period, showing form, quantity, and location, and

5. reactor-operating data necessary for determining and reporting on the production and consumption of any nuclear materials and the use of the Tarapur Atomic Power Station.

B. With respect to reports, information covering the following will be included:

1. all receipts and removals of nuclear materials,

2. any production and consumption of nuclear materials,

3. any known losses and unaccounted for nuclear materials,

4. all inventories of nuclear materials, and

5. the operation of the Tarapur Atomic Power Station, including unusual incidents; and significant modifications made or to be made in the plant or in the fueling program.

Routine reports covering the foregoing elements shall be submitted to the Government of the United States of America and the Government of India on a monthly basis. Any losses of nuclear materials however, or any unusual incidents or major changes in the fueling program will be reported as soon as the loss has been discovered or the change has been scheduled.

1. The term "nuclear material" as used in this Annexure means both source materials and special nuclear materials as they are defined in Article IX of this Agreement. The parties further agree that if any special nuclear materials which is made available to India pursuant to this Agreement or which is made available to India pursuant to this Agreement or produced in the Tarapur Atomic Power station is placed, in accordance with this Agreement in any facilities in India other than the Tarapur Atomic Station then the principles of the agreed upon system referred to in paragraph B.2 of Articles of this agreement and set forth in this Annexure will be applied to such a situation.

The records and reports will include such details as may be modified by mutual agreement. In the event of unusual incidents special reports may be requested including such amplifications and elucidations as each party considers relevant to the achievements of the objectives of Article VI.

ANNEXURE II

INDO- FRENCH AGREEMENT OF 1982

Within the framework of 1963 Agreement for cooperation between India and the United States, France in lieu of the USA has agreed to supply enriched uranium for the Tarapur plant. India shall use the special nuclear material supplied by France or by-products derived from it only for peaceful purposes and research in and production of electrical energy as had been provided for in the said agreement.

This commitment shall be subject to the safeguards provided for in the 1963 cooperation agreements between India and US and in the 1971 trilateral agreement between the United States, India and IAEA.

During the life of the 1963 agreement France and India shall consult with a view to agreeing on the arrangements to ensure the implementation as may be necessary of the provisions of the preceding paragraphs.

For and on behalf of the
Government of India

Homi N. sethna
Principal Secretary
Department of Atomic Energy
Government of India
26th November 1982

For and on behalf of the
Government of Republic of France

Andre Ross
Ambassador of France
26th November 1982

ANNEXURE III

INDO - US JOINT STATEMENT OF 18 JULY 2005

The following is the text of Indo-US Joint Statement issued after the delegation-level meeting between the Prime Minister, Dr. Manmohan Singh and the US President Mr. George W. Bush, in Washington DC on July 18, 2005.

"Prime Minister Manmohan Singh and President Bush today declare their resolve to transform the relationship between their countries and establish a global partnership. As leaders of nations committed to the values of human freedom, democracy and rule of law, the new relationship between India and the United States will promote stability, democracy, prosperity and peace throughout the world. It will enhance our ability to work together to provide global leadership in areas of mutual concern and interest.

Building on their common values and interests, the two leaders resolve:

· To create an international environment conducive to promotion of democratic values, and to strengthen democratic practices in societies which wish to become more open and pluralistic.

· To combat terrorism relentlessly. They applaud the active and vigorous counterterrorism cooperation between the two countries and support more international efforts in this direction. Terrorism is a global scourge and the one we will fight everywhere. The two leaders strongly affirm their commitment to the conclusion by September of a UN comprehensive convention against international terrorism.

The Prime Minister's visit coincides with the completion of the Next Steps in Strategic Partnership (NSSP) initiative, launched in January 2004. The two leaders agree that this provides the basis for expanding bilateral activities and commerce in space, civil nuclear energy and dual-use technology.

Drawing on their mutual vision for the U.S.-India relationship, and our joint objectives as strong long-standing democracies, the two leaders agree on the following:

FOR THE ECONOMY

· Revitalize the U.S.-India Economic Dialogue and launch a CEO Forum to harness private sector energy and ideas to deepen the bilateral economic relationship.

· Support and accelerate economic growth in both countries through greater trade, investment, and technology collaboration.

· Promote modernization of India's infrastructure as a prerequisite for the continued growth of the Indian economy. As India enhances its investment climate, opportunities for investment will increase.

· Launch a U.S.-India Knowledge Initiative on Agriculture focused on promoting teaching, research, service and commercial linkages.

FOR ENERGY AND THE ENVIRONMENT

· Strengthen energy security and promote the development of stable and efficient energy markets in India with a view to ensuring adequate, affordable energy supplies and conscious of the need for sustainable development. These issues will be addressed through the U.S.-India Energy Dialogue.

· Agree on the need to promote the imperatives of development and safeguarding the environment, commit to developing and deploying cleaner, more efficient, affordable, and diversified energy technologies.

FOR DEMOCRACY AND DEVELOPMENT

· Develop and support, through the new U.S.-India Global Democracy Initiative in countries that seek such assistance, institutions and resources that strengthen the foundations that make democracies credible and effective. India and the U.S. will work together to strengthen democratic practices and capacities and contribute to the new U.N. Democracy Fund.

· Commit to strengthen cooperation and combat HIV/AIDS at a global level through an initiative that mobilizes private sector and government resources, knowledge, and expertise.

FOR NON-PROLIFERATION AND SECURITY

· Express satisfaction at the New Framework for the U.S.-India Defense Relationship as a basis for future cooperation, including in the field of defense technology.

· Commit to play a leading role in international efforts to prevent the proliferation of Weapons of Mass Destruction. The U.S. welcomed the adoption by India of legislation on WMD (Prevention of Unlawful Activities Bill).

· Launch a new U.S.-India Disaster Relief Initiative that builds on the experience of the Tsunami Core Group, to strengthen cooperation to prepare for and conduct disaster relief operations.

FOR HIGH-TECHNOLOGY AND SPACE

· Sign a Science and Technology Framework Agreement, building on the U.S.-India High-Technology Cooperation Group (HTCG), to provide for joint research and training, and the establishment of public-private partnerships.

· Build closer ties in space exploration, satellite navigation and launch, and in the commercial space arena through mechanisms such as the U.S.-India Working Group on Civil Space Cooperation.

· Building on the strengthened non-proliferation commitments undertaken in the NSSP, to remove certain Indian organizations from the Department of Commerce's Entity List.

Recognizing the significance of civilian nuclear energy for meeting growing global energy demands in a cleaner and more efficient manner, the two leaders discussed India's plans to develop its civilian nuclear energy program.

President Bush conveyed his appreciation to the Prime Minister over India's strong commitment to preventing WMD proliferation and stated that as a responsible state with advanced nuclear technology, India should acquire the same benefits and advantages as other such states. The President told the Prime Minister that he will work to achieve full civil nuclear energy cooperation with India as it realizes its goals of promoting nuclear power and achieving energy security. The President would also seek agreement from Congress to adjust U.S. laws and policies, and the United States will work with friends and allies to adjust international regimes to enable full civil nuclear energy cooperation and trade with India, including but not limited to expeditious consideration of fuel supplies for safeguarded nuclear reactors at Tarapur. In the meantime, the United States will encourage its partners to also consider this request expeditiously. India has expressed its interest in ITER and a willingness to contribute. The United States will consult with its partners considering India's participation. The United States will consult with the other participants in the Generation IV International Forum with a view toward India's inclusion.

The Prime Minister conveyed that for his part, India would reciprocally agree that it would be ready to assume the same responsibilities and practices and acquire the same benefits and advantages as other leading countries with advanced nuclear technology, such as the United States. These responsibilities and practices consist of identifying and separating civilian and military nuclear facilities and programs in a phased manner and filing a declaration regarding its civilians facilities with the International Atomic Energy Agency (IAEA); taking a decision to place voluntarily its civilian nuclear facilities under IAEA safeguards; signing and adhering to an Additional Protocol with respect to civilian nuclear facilities; continuing India's unilateral moratorium on nuclear testing; working with the United States for the conclusion of a multilateral Fissile Material Cut Off Treaty; refraining from transfer of enrichment and reprocessing technologies to states that do not have them and supporting international efforts to limit their spread; and ensuring that the necessary steps have been taken to secure nuclear materials and technology through comprehensive export control legislation and through harmonization and adherence to Missile Technology Control Regime (MTCR) and Nuclear Suppliers Group (NSG) guidelines.

The President welcomed the Prime Minister's assurance. The two leaders agreed to establish a working group to undertake on a phased basis in the months ahead the

necessary actions mentioned above to fulfill these commitments. The President and Prime Minister also agreed that they would review this progress when the President visits India in 2006.

The two leaders also reiterated their commitment that their countries would play a leading role in international efforts to prevent the proliferation of weapons of mass destruction, including nuclear, chemical, biological and radiological weapons.

In light of this closer relationship, and the recognition of India's growing role in enhancing regional and global security, the Prime Minister and the President agree that international institutions must fully reflect changes in the global scenario that have taken place since 1945. The President reiterated his view that international institutions are going to have to adapt to reflect India's central and growing role. The two leaders state their expectations that India and the United States will strengthen their cooperation in global forums.

Prime Minister Manmohan Singh thanks President Bush for the warmth of his reception and the generosity of his hospitality. He extends an invitation to President Bush to visit India at his convenience and the President accepts that invitation."

ANNEX-IV

U.S.-India Joint Statement of March 2, 2006

President George W. Bush and Prime Minister Manmohan Singh today expressed satisfaction with the great progress the United States and India have made in advancing our strategic partnership to meet the global challenges of the 21st century. Both our countries are linked by a deep commitment to freedom and democracy; a celebration of national diversity, human creativity and innovation; a quest to expand prosperity and economic opportunity worldwide; and a desire to increase mutual security against the common threats posed by intolerance, terrorism, and the spread of weapons of mass destruction. The successful transformation of the U.S.-India relationship will have a decisive and positive influence on the future international system as it evolves in this new century.

Reviewing the progress made in deepening the global partnership between the United States and India since their Joint Statement of July 18, 2005, the President and the Prime Minister reaffirm their commitment to expand even further the growing ties between their two countries. Consistent with this objective, the two leaders wish to highlight efforts the United States and India are making together in the following areas, where they have:

FOR ECONOMIC PROSPERITY AND TRADE

(1) Agreed to intensify efforts to develop a bilateral business climate supportive of trade and investment by:

1. Welcoming the report of the U.S.-India CEO Forum, agreeing to consider its recommendations aimed at substantially broadening our bilateral economic relations, and directing the Chairs of the Indo-U.S. Economic Dialogue to follow up expeditiously with the CEO Forum;
2. Endorsing the efforts of the U.S.-India Trade Policy Forum to reduce barriers to trade and investment with the goal of doubling bilateral trade in three years;
3. Agreeing to advance mutually beneficial bilateral trade and investment flows by holding a high-level public-private investment summit in 2006, continuing efforts to facilitate and promote foreign direct investment and eliminate impediments to it, and enhancing bilateral consultations on various issues including tariff and non-tariff barriers to trade in goods and services, and preventing the illicit use of the financial system.

(2) Sought to expand cooperation in agriculture by:

1. Launching the Knowledge Initiative on Agriculture with a three-year financial commitment to link our universities, technical institutions, and businesses to

support agriculture education, joint research, and capacity building projects including in the area of biotechnology.

2. Endorsing an agreed workplan to promote bilateral trade in agriculture through agreements that: lay out a path to open the U.S. market to Indian mangoes, recognize India as having the authority to certify that shipments of Indian products to the United States meet USDA organic standards, and provide for discussions on current regulations affecting trade in fresh fruits and vegetables, poultry and dairy, and almonds.

(3) Reaffirmed their shared commitment to completing the WTO Doha Development Agenda (DDA) before the end of 2006, and agreed to work together to help achieve this outcome.

FOR ENERGY SECURITY AND A CLEAN ENVIRONMENT

(1) Welcomed the successful completion of discussions on India's separation plan and looked forward to the full implementation of the commitments in the July 18, 2005 Joint Statement on nuclear cooperation. This historic accomplishment will permit our countries to move forward towards our common objective of full civil nuclear energy cooperation between India and the United States and between India and the international community as a whole.

(2) Welcomed the participation of India in the ITER initiative on fusion energy as an important further step towards the common goal of full nuclear energy cooperation.

(3) Agreed on India's participation in FutureGen, an international public-private partnership to develop new, commercially viable technology for a clean coal near-zero emission power project. India will contribute funding to the project and participate in the Government Steering Committee of this initiative.

(4) Welcomed the creation of the Asia Pacific Partnership on Clean Development and Climate, which will enable India and the U.S. to work together with other countries in the region to pursue sustainable development and meet increased energy needs while addressing concerns of energy security and climate change. The Partnership will collaborate to promote the development, diffusion, deployment and transfer of cleaner, cost-effective and more efficient technologies and practices.

(5) Welcomed India's interest in the Integrated Ocean Drilling Program, an international marine research endeavor that will contribute to long-term energy solutions such as gas hydrates.

(6) Noting the positive cooperation under the Indo-U.S. Energy Dialogue, highlighted plans to hold joint conferences on topics such as energy efficiency and natural gas, to conduct study missions on renewable energy, to establish a clearing house in India for coal-bed methane/coal-mine methane, and to exchange energy market information.

FOR INNOVATION AND THE KNOWLEDGE ECONOMY

(1) Emphasizing the importance of knowledge partnerships, announced the establishment of a Bi-National Science and Technology Commission which the U.S. and India will co-fund. It will generate collaborative partnerships in science and technology and promote industrial research and development.

(2) Agreed that the United States and India would work together to promote innovation, creativity and technological advancement by providing a vibrant intellectual property rights regime, and to cooperate in the field of intellectual property rights to include capacity building activities, human resource development and public awareness programs.

(3) Agreed to continue exploring further cooperation in civil space, including areas such as space exploration, satellite navigation, and earth science. The United States and India committed to move forward with agreements that will permit the launch of U.S. satellites and satellites containing U.S. components by Indian space launch vehicles, opening up new opportunities for commercial space cooperation between the two countries.

(4) Welcomed the inclusion of two U.S. instruments in the Indian lunar mission Chandrayaan-1. They noted that memoranda of understanding to be signed by ISRO and NASA would be significant steps forward in this area.

(5) Welcomed the U.S. Department of Commerce's plan to create a license exception for items that would otherwise require an export license to end-users in India engaged solely in civilian activities.

FOR GLOBAL SAFETY AND SECURITY

(1) Noted the enhanced counter-terrorism cooperation between the two countries and stressed that terrorism is a global scourge that must be fought and rooted out in every part of the world.

(2) Welcomed the increased cooperation between the United States and India in the defense area, since the New Framework for the U.S.-India Defence Relationship was signed on June 28, 2005, as evidenced by successful joint exercises, expanded defence cooperation and information sharing, and greater opportunities to jointly develop technologies and address security and humanitarian issues.

(3) Reaffirmed their commitment to the protection of the free flow of commerce and to the safety of navigation, and agreed to the conclusion of a Maritime Cooperation Framework to enhance security in the maritime domain, to prevent piracy and other transnational crimes at sea, carry out search and rescue operations, combat marine pollution, respond to natural disasters, address emergent threats and enhance cooperative

capabilities, including through logistics support. Both sides are working to finalize a Logistics Support Agreement at the earliest.

(4) Welcomed India's intention to join the Container Security Initiative aimed at making global maritime trade and infrastructure more secure and reducing the risk of shipping containers being used to conceal weapons of mass destruction.

(5) Reiterated their commitment to international efforts to prevent the proliferation of weapons of mass destruction.

(6) Building on the July 2005 Disaster Relief Initiative, noted the important disaster management cooperation and their improved capabilities to respond to disaster situations.

(7) Recognized the importance of capacity building in cyber security and greater cooperation to secure their growing electronic interdependencies, including to protect electronic transactions and critical infrastructure from cyber crime, terrorism and other malicious threats.

DEEPENING DEMOCRACY AND MEETING INTERNATIONAL CHALLENGES

(1) Recalled their joint launch of the UN Democracy Fund in September 2005 and offered the experience and expertise of both Governments for capacity building, training and exchanges to third countries that request such assistance to strengthen democratic institutions.

(2) Welcomed the decision of India and the United States to designate a representative to the Government Advisory Board of the International Centre for Democratic Transition (ICDT) located in Budapest to facilitate cooperative activities with ICDT.

(3) Agreed that the Virtual Coordination and Information Centres set up in September 2005 should be further strengthened and a bilateral meeting aimed at developing a practical programme for utilization of its services be held soon.

(4) Expressed satisfaction at the expedited USFDA drug approval processes that strengthen the combat against HIV/AIDS at the global level and encourage greater corporate participation to meet this challenge, including the establishment of the Indo-U.S. Corporate Fund for HIV/AIDS.

(5) Agreed to expand bilateral efforts and continue cooperation in the area of medical research and strengthen technical capacity in food and drug regulation in India as well as address the concern on avian influenza, including agreement to reach out to the private sector, develop regional communications strategies, and plan an in-region containment and response exercise. The President welcomed India's offer to host the International Partnership on Avian and Pandemic Influenza meeting in 2007.

(6) Welcomed India's membership in the Coalition against Wildlife Trafficking, a partnership through which we will collaborate in the fight against illegal trade in wildlife and wildlife parts; we also welcome the opportunity to strengthen longstanding work together on the conservation of wildlife through cooperation on park management and ecotourism.

President Bush thanked Prime Minister Singh and the people of India for the warmth of their reception and the generosity of their hospitality.

ANNEXURE-V

Implementation of the India-United States Joint Statement of July 18, 2005: India's Separation Plan

The resumption of full civilian nuclear energy cooperation between India and the United States arose in the context of India's requirement for adequate and affordable energy supplies to sustain its accelerating economic growth rate and as recognition of its growing technological prowess. It was preceded by discussions between the two Governments, particularly between President Bush and Prime Minister Manmohan Singh, of the global energy scenario and the long-term implications of increasing pressure on hydrocarbon resources and rising oil prices. These developments led to the announcement in April 2005 of an Indo-US Energy Dialogue that encompassed the entire spectrum of energy options ranging from oil and gas to coal, alternative fuels and civilian nuclear energy. Through the initiation of a sustained dialogue to address energy security concerns, the two countries sought to promote stable, efficient, predictable and cost effective solutions for India's growing requirements. At the same time, they also agreed on the need to develop and deploy cleaner, more efficient, affordable and diversified energy technologies to deal with the environmental implications of energy consumption. India had developed proven and wide ranging capabilities in the nuclear sector, including over the entire nuclear fuel cycle. It is internationally recognized that India has unique contributions to make to international efforts towards meeting these objectives. India has become a full partner in ITER, with the full support of the US and other partners. India also accepted the US invitation to join the initiative on Clean Development Partnership.

2. Noting the centrality of civilian nuclear energy to the twin challenges of energy security and safeguarding the environment, the two Governments agreed on 18 July 2005 to undertake reciprocal commitments and responsibilities that would create a framework for the resumption of full cooperation in this field. On its part, the United States undertook to:

- Seek agreement from the Congress to adjust US laws and policies to achieve full civil nuclear energy cooperation.

- Work with friends and allies to adjust international regimes to enable full civil nuclear energy cooperation and trade with India, including but not limited to expeditious consideration of fuel supplies for safeguarded nuclear reactors at Tarapur.

- In the meantime, encourage its partners to consider fuel supply to Tarapur expeditiously.

- To consult with its partners to consider India's participation in ITER.

- To consult with other participants in the Generation IV International Forum with a view towards India's inclusion.

3. India had conveyed its readiness to assume the same responsibilities and practices and acquire the same benefits and advantages as other leading countries with advanced nuclear technology, such as the United States. Accordingly, India for its part undertook the following commitments:

- Identifying and separating civilian and military nuclear facilities and programmes in a phased manner.

- Filing a declaration regarding its civilian facilities with the IAEA.

- Taking a decision to place voluntarily its civilian nuclear facilities under IAEA safeguards, and

- Signing and adhering to an Additional Protocol with respect to civilian nuclear facilities.

4. Other commitments undertaken by India have already been fulfilled in the last year. Among them are:

- India's responsible non-proliferation record, recognized by the US, continues and is reflected in its policies and actions.

- The harmonization of India's export controls with NSG and MTCR Guidelines even though India is not a member of either group. These guidelines and control lists have been notified and are being implemented.

- A significant upgrading of India's non-proliferation regulations and export controls has taken place as a result of Weapons of Mass Destruction Act of May 2005. Inter-Ministerial consultations are ongoing to examine and amend other relevant Acts as well as framing appropriate rules and regulations.

- Refrain from transfer of enrichment and reprocessing technologies to states that do not have them and supporting international efforts to limit their spread. This has guided our policy on non-proliferation.

- Continued unilateral moratorium on nuclear testing, and

- Willingness to work with the United States for the conclusion of a multilateral Fissile Material Cut-Off Treaty.

5. The Joint Statement of 18 July 2005, recognized that India is ready to assume the same responsibilities and practices as other leading countries with advanced nuclear technology, such as the United States. India has an impeccable record in non-proliferation. The Joint Statement acknowledges that India's nuclear programme has both a military and a civilian component. Both sides had agreed that the purpose was not to constrain India's strategic programme but to enable resumption of full civil nuclear energy cooperation in order to enhance global energy and environmental security. Such cooperation was predicated on the assumption that any international civil nuclear energy cooperation (including by the US) offered to India in the civilian sector should, firstly, not be diverted away from civilian purposes, and secondly, should not be transferred from India to third countries without safeguards. These concepts will be reflected in the Safeguards Agreement to be negotiated by India with IAEA.

6. India's nuclear programme is unique as it is the only state with nuclear weapons not to have begun with a dedicated military programme. It must be appreciated that the strategic programme is an offshoot of research on nuclear power programme and consequently, it is embedded in a larger undifferentiated programme. Identification

of purely civilian facilities and programmes that have no strategic implications poses a particular challenge. Therefore, facilities identified as civilian in the Separation Plan will be offered for safeguards in phases to be decided by India. The nature of the facility concerned, the activities undertaken in it, the national security significance of materials and the location of the facilities are factors taken into account in undertaking the separation process. This is solely an Indian determination.

7. The nuclear establishment in India not only built nuclear reactors but promoted the growth of a national industrial infrastructure. Nuclear power generation was envisaged as a three-stage programme with PHWRs chosen for deployment in the first stage. As indigenous reactors were set up, several innovative design improvements were carried out based on Indian R&D and a standardized design was evolved. The research and technology development spanned the entire spectrum of the nuclear fuel cycle including the front end and the back end. Success in the technologies for the back end of the fuel cycle allowed us to launch the second stage of the programme by constructing a Fast Breeder Test Reactor. This reactor has operated for 20 years based on a unique carbide fuel and has achieved all technology objectives. We have now proceeded further and are constructing a 500 MWe Prototype Fast Breeder Reactor. Simultaneously, we have launched design and development of reactors aimed at thorium utilization and incorporating inherent safety features.

8. Concepts such as grid connectivity are not relevant to the separation exercise. Issues related to fuel resource sustainability, technical design and economic viability, as well as smooth operation of reactors are relevant factors. This would necessitate grid connectivity irrespective of whether the reactor concerned is civilian or not civilian.

9. It must be recognized that the Indian nuclear programme still has a relatively narrow base and cannot be expected to adopt solutions that might be deemed viable by much larger programmes. A comparison of the number of reactors and the total installed capacity between India and the P-5 brings this out graphically:

Country	**Number of Reactors**	**Total Installed Capacity**
India	15	3.04 GWe (2.8% of the total production)
USA	104 (103 operational)	99.21 GWe (19.9% of the total production)
France	59	63.36 GWe (78.1% of the total production)
UK	23	11.85 GWe (19.4% of the total production)
Russia	31	21.74 GWe (15.6% of the total production)
China	9	6.602 GWe (2.2% of the total production)

Source: Nuclear Energy Institute, Washington DC

10. Another factor to be taken into account is the small capacity of the reactors produced indigenously by India, some of which would remain outside safeguards. Therefore, in assessing the extent of safeguards coverage, it would be important to look at both the number of reactors and the percentage of installed capacity covered.

An average Indian reactor is of 220 MW and its output is significantly smaller than the standard reactor in a P-5 economy. The chart below illustrates this aspect:

Country	**Most Common reactor**	**Number of such reactors**
India	PHWRs 220 MWe	12
USA	69 PWRs and 34 BWRs. Most plants are in the range of 1000-1250 MWe	51 Reactors in the range of 1000 MWe to 1250 MWe
France	PWRs of 900 MWe and 1300 MWe size	34 PWRs of 900 MWe and 20 PWRs of 1300 MWe
UK	No standard size. AGR is the most common in the range of 600-700 MWe	14 AGRs
Russia	3rd Generation VVER-1000 PWRs and RBMK 1000 Light, Water Graphite Reactors	9 third Generation VVER-1000 PWRs and 11 RBMK 1000 Light Water Graphite Reactors
China	PWRs 984 MWe	Four

Source: Uranium Information Centre, Melbourne

11. The complexity of the separation process is further enhanced by the limited resources that India has devoted to its nuclear programme as compared to P-5 nations. Moreover, as India expands international cooperation, the percentage of its thermal power reactor installed capacity under safeguards would rise significantly as fresh capacity is added through such cooperation.

12. India's approach to the separation of its civilian nuclear facilities is guided by the following principles:

- Credible, feasible, and implementable in a transparent manner;

- Consistent with the understandings of the 18 July Statement;

- Consistent with India's national security and R&D requirements as well as not prejudicial to the three-stage nuclear programme in India;

- Must be cost effective in its implementation; and

- Must be acceptable to Parliament and public opinion.

13. Based on these principles, India will:

- Include in the civilian list only those facilities offered for safeguards that, after separation, will no longer be engaged in activities of strategic significance.

- The overarching criterion would be a judgement whether subjecting a facility to IAEA safeguards would impact adversely on India's national security.

- However, a facility will be excluded from the civilian list if it is located in a larger hub of strategic significance, notwithstanding the fact that it may not be normally engaged in activities of strategic significance.

- A civilian facility would therefore, be one that India has determined not to be relevant to its strategic programme.

14. Taking the above into account, India, on the basis of reciprocal actions by the US, will adopt the following approach:

i) Thermal Power Reactors: India will identify and offer for safeguards 14 thermal power reactors between 2006 and 2014. This will include the 4 presently safeguarded reactors (TAPS 1&2, RAPS 1&2) and in addition KK 1&2 that are under construction.8 other PHWRs, each of a capacity of 220MW, will also be offered. Phasing of specific thermal power reactors, being offered for safeguards would be indicated separately by India. Such an offer would, in effect, cover 14 out of the 22 thermal power reactors in operation or currently under construction to be placed under safeguards, and would raise the total installed Thermal Power capacity by MWs under safeguards from the present 19% to 65% by 2014.

ii) Fast Breeder Reactors: India is not in a position to accept safeguards on the Prototype Fast Breeder Reactors (PFBR) and the Fast Breeder Test Reactor (FBTR), both located at Kalpakkam. The Fast Breeder Programme is at the R&D stage and its technology will take time to mature and reach an advanced stage of development.

iii) Future Reactors: India has decided to place under safeguards all future civilian thermal power reactors and civilian breeder reactors, and the Government of India retains the sole right to determine such reactors as civilian.

iv) Research Reactors: India will permanently shut down the CIRUS reactor, in 2010. It will also be prepared to shift the fuel core of the APSARA reactor that was purchased from France outside BARC and make the fuel core available to be placed under safeguards in 2010.

v) Upstream facilities: The following upstream facilities would be identified and separated as civilian:

- List of those specific facilities in the Nuclear Fuel Complex, which will be offered for safeguards by 2008 will be indicated separately.
- The Heavy Water Production plants at Thal, Tuticorin and Hazira are proposed to be designated for civilian use between 2006-2009. We do not consider these plants as relevant for safeguards purposes.

vi) **Downstream facilities:** The following downstream facilities would be identified and separated as civilian:

- India is willing to accept safeguards in the 'campaign' mode after 2010 in respect of the Tarapur Power Reactor Fuel Reprocessing Plant.
- The Tarapur and Rajasthan 'Away From Reactors' spent fuel storage pools would be made available for safeguards with appropriate phasing between2006-2009.

vii) Research Facilities: India will declare the following facilities as civilian:

(a) Tata Institute of Fundamental research
(b) Variable Energy Cyclotron Centre

(c) Saha Institute of Nuclear Physics
(d) Institute for Plasma Research
(e) Institute of Mathematics Science
(f) Institute of Physics
(g) Tata Memorial Centre
(h) Board of Radiation and Isotope Technology
(i) Harish Chandra Research Institute

These facilities are safeguards-irrelevant. It is our expectation that they will play a prominent role in international cooperation.

15. **Safeguards:**

a) The United States has conveyed its commitment to the reliable supply of fuel to India. Consistent with the July 18, 2005, Joint Statement, the United States has also reaffirmed its assurance to create the necessary conditions for India to have assured and full access to fuel for its reactors. As part of its implementation of the July 18, 2005, Joint Statement the United States is committed to seeking agreement from the U.S. Congress to amend its domestic laws and to work with friends and allies to adjust the practices of the Nuclear Suppliers Group to create the necessary conditions for India to obtain full access to the international fuel market, including reliable, uninterrupted and continual access to fuel supplies from firms in several nations.
b) To further guard against any disruption of fuel supplies, the United States is prepared to take the following additional steps:

i) The United States is willing to incorporate assurances regarding fuel supply in the bilateral U.S.-India agreement on peaceful uses of nuclear energy under Section 123 of the U.S. Atomic Energy Act, which would be submitted to the U.S. Congress.
ii) The United States will join India in seeking to negotiate with the IAEA an India-specific fuel supply agreement.
iii) The United States will support an Indian effort to develop a strategic reserve of nuclear fuel to guard against any disruption of supply over the lifetime of India's reactors.
iv) If despite these arrangements, a disruption of fuel supplies to India occurs, the United States and India would jointly convene a group of friendly supplier countries to include countries such as Russia, France and the United Kingdom to pursue such measures as would restore fuel supply to India.

c) In light of the above understandings with the United States, an India-specific safeguards agreement will be negotiated between India and the IAEA providing for safeguards to guard against withdrawal of safeguarded nuclear material from civilian use at any time as well as providing for corrective measures that India may take to ensure uninterrupted operation of its civilian nuclear reactors in the event of disruption of foreign fuel supplies. Taking this into account, India will place its civilian nuclear facilities under India-specific safeguards in perpetuity and negotiate an appropriate safeguards agreement to this end with the IAEA.

16. This plan is in conformity with the commitments made to Parliament by the Government.

ANNEXURE VI

Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006*

H.R.5682

To exempt from certain requirements of the Atomic Energy Act of 1954 a proposed nuclear agreement for cooperation with India. (Enrolled as Agreed to or Passed by Both House and Senate)

One Hundred Ninth Congress
of the
United States of America
AT THE SECOND SESSION

Begun and held at the City of Washington on Tuesday,

the third day of January, two thousand and six

An Act

To exempt from certain requirements of the Atomic Energy Act of 1954 a proposed nuclear agreement for cooperation with India.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I--UNITED STATES AND INDIA NUCLEAR COOPERATION

SEC. 101. SHORT TITLE.

This title may be cited as the `Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006'.

SEC. 102. SENSE OF CONGRESS.

It is the sense of Congress that--

(1) Preventing the proliferation of nuclear weapons, other weapons of mass destruction, the means to produce them, and the means to deliver them are critical objectives for United States foreign policy;

(2) Sustaining the Nuclear Non-Proliferation Treaty (NPT) and strengthening its implementation, particularly its verification and compliance, is the keystone of United States nonproliferation policy;

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* From The Thomas Library of the U.S. Congress

(3) The NPT has been a significant success in preventing the acquisition of nuclear weapons capabilities and maintaining a stable international security situation;
(4) countries that have never become a party to the NPT and remain outside that treaty's legal regime pose a potential challenge to the achievement of the overall goals of global nonproliferation, because those countries have not undertaken the NPT obligation to prohibit the spread of nuclear weapons capabilities;
(5) It is in the interest of the United States to the fullest extent possible to ensure that those countries that are not States Party to the NPT are responsible in the disposition of any nuclear technology they develop;
(6) it is in the interest of the United States to enter into an agreement for nuclear cooperation arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153) with a country that has never been a State Party to the NPT if--
(A) The country has demonstrated responsible behavior with respect to the nonproliferation of technology related to nuclear weapons and the means to deliver them;
(B) The country has a functioning and uninterrupted democratic system of government, has a foreign policy that is congruent to that of the United States, and is working with the United States on key foreign policy initiatives related to nonproliferation;
(C) such cooperation induces the country to promulgate and implement substantially improved protections against the proliferation of technology related to nuclear weapons and the means to deliver them, and to refrain from actions that would further the development of its nuclear weapons program; and
(D) such cooperation will induce the country to give greater political and material support to the achievement of United States global and regional nonproliferation objectives, especially with respect to dissuading, isolating, and, if necessary, sanctioning and containing states that sponsor terrorism and terrorist groups that are seeking to acquire a nuclear weapons capability or other weapons of mass destruction capability and the means to deliver such weapons;
(7) The United States should continue its policy of engagement, collaboration, and exchanges with and between India and Pakistan;
(8) Strong bilateral relations with India are in the national interest of the United States;
(9) The United States and India share common democratic values and the potential for increasing and sustained economic engagement;
(10) Commerce in civil nuclear energy with India by the United States and other countries has the potential to benefit the people of all countries;
(11) Such commerce also represents a significant change in United States policy regarding commerce with countries that are not States Party to the NPT, which remains the foundation of the international nonproliferation regime;
(12) any commerce in civil nuclear energy with India by the United States and other countries must be achieved in a manner that minimizes the risk of nuclear proliferation or regional arms races and maximizes India's adherence to international nonproliferation regimes, including, in particular, the guidelines of the Nuclear Suppliers Group (NSG); and
(13) The United States should not seek to facilitate or encourage the continuation of nuclear exports to India by any other party if such exports are terminated under United States law.

SEC. 103. STATEMENTS OF POLICY.

(a) In General- The following shall be the policies of the United States:
(1) Oppose the development of a capability to produce nuclear weapons by any non-nuclear weapon state, within or outside of the NPT.
(2) Encourage States Party to the NPT to interpret the right to `develop research, production and use of nuclear energy for peaceful purposes', as set forth in Article IV of the NPT, as being a right that applies only to the extent that it is consistent with the object and purpose of the NPT to prevent the spread of nuclear weapons and nuclear weapons capabilities, including by refraining from all nuclear cooperation with any State Party that the International Atomic Energy Agency (IAEA) determines is not in full compliance with its NPT obligations, including its safeguards obligations.
(3) Act in a manner fully consistent with the Guidelines for Nuclear Transfers and the Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology developed by the NSG, and decisions related to the those guidelines, and the rules and practices regarding NSG decision making.
(4) Strengthen the NSG guidelines and decisions concerning consultation by members regarding violations of supplier and recipient understandings by instituting the practice of a timely and coordinated response by NSG members to all such violations, including termination of nuclear transfers to an involved recipient, that discourages individual NSG members from continuing cooperation with such recipient until such time as a consensus regarding a coordinated response has been achieved.
(5) Given the special sensitivity of equipment and technologies related to the enrichment of uranium, the reprocessing of spent nuclear fuel, and the production of heavy water, work with members of the NSG, individually and collectively, to further restrict the transfers of such equipment and technologies, including to India.
(6) Seek to prevent the transfer to a country of nuclear equipment, materials, or technology from other participating governments in the NSG or from any other source if nuclear transfers to that country are suspended or terminated pursuant to this title, the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), or any other United States law.
(b) With Respect to South Asia- The following shall be the policies of the United States with respect to South Asia:
(1) Achieve, at the earliest possible date, a moratorium on the production of fissile material for nuclear explosive purposes by India, Pakistan, and the People's Republic of China.
(2) Achieve, at the earliest possible date, the conclusion and implementation of a treaty banning the production of fissile material for nuclear weapons to which both the United States and India become parties.
(3) Secure India's--
(A) Full participation in the Proliferation Security Initiative;
(B) Formal commitment to the Statement of Interdiction Principles of such Initiative;
(C) Public announcement of its decision to conform its export control laws, regulations, and policies with the Australia Group and with the Guidelines, Procedures, Criteria, and Control Lists of the Wassenaar Arrangement;
(D) Demonstration of satisfactory progress toward implementing the decision described in subparagraph (C); and

(E) Ratification of or accession to the Convention on Supplementary Compensation for Nuclear Damage, done at Vienna on September 12, 1997.
(4) Secure India's full and active participation in United States efforts to dissuade, isolate, and, if necessary, sanction and contain Iran for its efforts to acquire weapons of mass destruction, including a nuclear weapons capability and the capability to enrich uranium or reprocess nuclear fuel, and the means to deliver weapons of mass destruction.
(5) Seek to halt the increase of nuclear weapon arsenals in South Asia and to promote their reduction and eventual elimination.
(6) Ensure that spent fuel generated in India's civilian nuclear power reactors is not transferred to the United States except pursuant to the Congressional review procedures required under section 131 f. of the Atomic Energy Act of 1954 (42 U.S.C. 2160 (f)).
(7) Pending implementation of the multilateral moratorium described in paragraph (1) or the treaty described in paragraph (2), encourage India not to increase its production of fissile material at unsafeguarded nuclear facilities.
(8) Ensure that any safeguards agreement or Additional Protocol to which India is a party with the IAEA can reliably safeguard any export or reexport to India of any nuclear materials and equipment.
(9) Ensure that the text and implementation of any agreement for cooperation with India arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153) meet the requirements set forth in subsections a.(1) and a.(3) through a.(9) of such section.
(10) Any nuclear power reactor fuel reserve provided to the Government of India for use in safeguarded civilian nuclear facilities should be commensurate with reasonable reactor operating requirements.

SEC. 104. WAIVER AUTHORITY AND CONGRESSIONAL APPROVAL.

(a) In General- If the President makes the determination described in subsection (b), the President may—

(1) exempt a proposed agreement for cooperation with India arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153) from the requirement of subsection a.(2) of such section;
(2) waive the application of section 128 of the Atomic Energy Act of 1954 (42 U.S.C. 2157) with respect to exports to India; and
(3) waive with respect to India the application of--
(A) section 129 a.(1)(D) of the Atomic Energy Act of 1954 (42 U.S.C. 2158(a)(1)(D)); and
(B) section 129 of such Act (42 U.S.C. 2158) regarding any actions that occurred before July 18, 2005.

(b) Determination by the President- The determination referred to in subsection (a) is a determination by the President that the following actions have occurred:
(1) India has provided the United States and the IAEA with a credible plan to separate civil and military nuclear facilities, materials, and programs, and has filed a declaration regarding its civil facilities and materials with the IAEA.

(2) India and the IAEA have concluded all legal steps required prior to signature by the parties of an agreement requiring the application of IAEA safeguards in perpetuity in accordance with IAEA standards, principles, and practices (including IAEA Board of Governors Document GOV/1621 (1973)) to India's civil nuclear facilities, materials, and programs as declared in the plan described in paragraph (1), including materials used in or produced through the use of India's civil nuclear facilities.
(3) India and the IAEA are making substantial progress toward concluding an Additional Protocol consistent with IAEA principles, practices, and policies that would apply to India's civil nuclear program.
(4) India is working actively with the United States for the early conclusion of a multilateral treaty on the cessation of the production of fissile materials for use in nuclear weapons or other nuclear explosive devices.
(5) India is working with and supporting United States and international efforts to prevent the spread of enrichment and reprocessing technology to any state that does not already possess full-scale, functioning enrichment or reprocessing plants.
(6) India is taking the necessary steps to secure nuclear and other sensitive materials and technology, including through--
(A) the enactment and effective enforcement of comprehensive export control legislation and regulations;
(B) harmonization of its export control laws, regulations, policies, and practices with the guidelines and practices of the Missile Technology Control Regime (MTCR) and the NSG; and
(C) adherence to the MTCR and the NSG in accordance with the procedures of those regimes for unilateral adherence.
(7) The NSG has decided by consensus to permit supply to India of nuclear items covered by the guidelines of the NSG.

(c) Submission to Congress-
(1) IN GENERAL- The President shall submit to the appropriate congressional committees the determination made pursuant to subsection (b), together with a report detailing the basis for the determination.
(2) INFORMATION TO BE INCLUDED- To the fullest extent available to the United States, the report referred to in paragraph (1) shall include the following information:
(A) A summary of the plan provided by India to the United States and the IAEA to separate India's civil and military nuclear facilities, materials, and programs, and the declaration made by India to the IAEA identifying India's civil facilities to be placed under IAEA safeguards, including an analysis of the credibility of such plan and declaration, together with copies of the plan and declaration.
(B) A summary of the agreement that has been entered into between India and the IAEA requiring the application of safeguards in accordance with IAEA practices to India's civil nuclear facilities as declared in the plan described in subparagraph (A), together with a copy of the agreement, and a description of the progress toward its full implementation.
(C) A summary of the progress made toward conclusion and implementation of an Additional Protocol between India and the IAEA, including a description of the scope of such Additional Protocol.

(D) A description of the steps that India is taking to work with the United States for the conclusion of a multilateral treaty banning the production of fissile material for nuclear weapons, including a description of the steps that the United States has taken and will take to encourage India to identify and declare a date by which India would be willing to stop production of fissile material for nuclear weapons unilaterally or pursuant to a multilateral moratorium or treaty.
(E) A description of the steps India is taking to prevent the spread of nuclear-related technology, including enrichment and reprocessing technology or materials that can be used to acquire a nuclear weapons capability, as well as the support that India is providing to the United States to further United States objectives to restrict the spread of such technology.
(F) A description of the steps that India is taking to secure materials and technology applicable for the development, acquisition, or manufacture of weapons of mass destruction and the means to deliver such weapons through the application of comprehensive export control legislation and regulations, and through harmonization with and adherence to MTCR, NSG, Australia Group, and Wassenaar Arrangement guidelines, compliance with United Nations Security Council Resolution 1540, and participation in the Proliferation Security Initiative.
(G) A description and assessment of the specific measures that India has taken to fully and actively participate in United States and international efforts to dissuade, isolate, and, if necessary, sanction and contain Iran for its efforts to acquire weapons of mass destruction, including a nuclear weapons capability and the capability to enrich uranium or reprocess nuclear fuel and the means to deliver weapons of mass destruction.
(H) A description of the decision of the NSG relating to nuclear cooperation with India, including whether nuclear cooperation by the United States under an agreement for cooperation arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153) is consistent with the decision, practices, and policies of the NSG.
(I) A description of the scope of peaceful cooperation envisioned by the United States and India that will be implemented under the agreement for nuclear cooperation, including whether such cooperation will include the provision of enrichment and reprocessing technology.
(J) A description of the steps taken to ensure that proposed United States civil nuclear cooperation with India will not in any way assist India's nuclear weapons program.

(d) Restrictions on Nuclear Transfers-
(1) IN GENERAL- Pursuant to the obligations of the United States under Article I of the NPT, nothing in this title constitutes authority to carry out any civil nuclear cooperation between the United States and a country that is not a nuclear-weapon State Party to the NPT that would in any way assist, encourage, or induce that country to manufacture or otherwise acquire nuclear weapons or nuclear explosive devices.
(2) NSG TRANSFER GUIDELINES- Notwithstanding the entry into force of an agreement for cooperation with India arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153) and pursuant to this title, no item subject to such agreement or subject to the transfer guidelines of the NSG, or to NSG decisions related thereto, may be transferred to India if such transfer would be inconsistent with the transfer guidelines of the NSG in effect on the date of the transfer.

(3) TERMINATION OF NUCLEAR TRANSFERS TO INDIA-
(A) IN GENERAL- Notwithstanding the entry into force of an agreement for cooperation with India arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153) and pursuant to this title, and except as provided under subparagraph (B), exports of nuclear and nuclear-related material, equipment, or technology to India shall be terminated if there is any materially significant transfer by an Indian person of--
(i) nuclear or nuclear-related material, equipment, or technology that is not consistent with NSG guidelines or decisions, or
(ii) ballistic missiles or missile-related equipment or technology that is not consistent with MTCR guidelines,
unless the President determines that cessation of such exports would be seriously prejudicial to the achievement of United States nonproliferation objectives or otherwise jeopardize the common defense and security.
(B) EXCEPTION- The President may choose not to terminate exports of nuclear and nuclear-related material, equipment, and technology to India under subparagraph (A) if--
(i) the transfer covered under such subparagraph was made without the knowledge of the Government of India;
(ii) at the time of the transfer, either the Government of India did not own, control, or direct the Indian person that made the transfer or the Indian person that made the transfer is a natural person who acted without the knowledge of any entity described in subparagraph (B) or (C) of section 110(5); and
(iii) the President certifies to the appropriate congressional committees that the Government of India has taken or is taking appropriate judicial or other enforcement actions against the Indian person with respect to such transfer.
(4) EXPORTS, REEXPORTS, TRANSFERS, AND RETRANSFERS TO INDIA RELATED TO ENRICHMENT, REPROCESSING, AND HEAVY WATER PRODUCTION-
(A) IN GENERAL-
(i) NUCLEAR REGULATORY COMMISSION- The Nuclear Regulatory Commission may only issue licenses for the export or reexport to India of any equipment, components, or materials related to the enrichment of uranium, the reprocessing of spent nuclear fuel, or the production of heavy water if the requirements of subparagraph (B) are met.
(ii) SECRETARY OF ENERGY- The Secretary of Energy may only issue authorizations for the transfer or retransfer to India of any equipment, materials, or technology related to the enrichment of uranium, the reprocessing of spent nuclear fuel, or the production of heavy water (including under the terms of a subsequent arrangement under section 131 of the Atomic Energy Act of 1954 (42 U.S.C. 2160)) if the requirements of
subparagraph (B) are met.

(B) REQUIREMENTS FOR APPROVALS. — Exports, re-exports, transfers, and retransfers referred to in subparagraph (A) may only be approved if—
(i) the end user—
(I) is a multinational facility participating in an IAEA-approved program to provide alternatives to national fuel cycle capabilities; or

(II) is a facility participating in, and the export, re-export, transfer, or retransfer is associated with, a bilateral or multinational program to develop a proliferation-resistant fuel cycle;
(ii) appropriate measures are in place at any facility referred to in clause (i) to ensure that no sensitive nuclear technology, as defined in section 4(5) of the Nuclear Nonproliferation Act of 1978 (22 U.S.C. 3203(5)), will be diverted to any person, site, facility, location, or program not under IAEA safeguards; and
(iii) the President determines that the export, re-export, transfer, or retransfer will not assist in the manufacture or acquisition of nuclear explosive devices or the production of fissile material for military purposes. (5) NUCLEAR EXPORT ACCOUNTABILITY PROGRAM.— (A) IN GENERAL.—The President shall ensure that all appropriate measures are taken to maintain accountability with respect to nuclear materials, equipment, and technology sold, leased, exported, or re-exported to India so as to ensure—
(i) full implementation of the protections required under section 123 a.(1) of the Atomic Energy Act of 1954 (42 U.S.C. 2153 (a)(1)); and
(ii) United States compliance with Article I of the NPT.
(B) MEASURES.—The measures taken pursuant to subparagraph (A) shall include the following:
(i) Obtaining and implementing assurances and conditions pursuant to the export licensing authorities of the Nuclear Regulatory Commission and the Department of Commerce and the authorizing authorities of the Department of Energy, including, as appropriate, conditions regarding endues monitoring.
(ii) A detailed system of reporting and accounting for technology transfers, including any retransfers in India, authorized by the Department of Energy pursuant to section 57 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2077(b)). Such system shall be capable of providing assurances that—
(I) the identified recipients of the nuclear technology are authorized to receive the nuclear technology;
(II) the nuclear technology identified for transfer will be used only for peaceful safeguarded nuclear activities and will not be used for any military or nuclear explosive purpose; and
(III) the nuclear technology identified for transfer will not be retransferred without the prior consent of the United States, and facilities, equipment, or materials derived through the use of transferred technology will not be transferred without the prior consent of the United States.
(iii) In the event the IAEA is unable to implement safeguards as required by an agreement for cooperation arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153), appropriate assurance that arrangements will be put in place expeditiously that are consistent with the requirements of section 123 a.(1) of such Act (42 U.S.C. 2153(a)(1)) regarding the maintenance of safeguards as set forth in the agreement regardless of whether the agreement is terminated or suspended for any reason.

(C) IMPLEMENTATION.—The measures described in subparagraph (B) shall be implemented to provide reasonable assurances that the recipient is complying with the

relevant requirements, terms, and conditions of any licenses issued by the United States regarding such exports, including those relating to the use, retransfer, safe handling, secure transit, and storage of such exports.

(e) JOINT RESOLUTION OF APPROVAL REQUIREMENT.—
Section 123 d. of the Atomic Energy Act of 1954 (42 U.S.C. 2153(d)) is amended in the second proviso by inserting after "that subsection" the following: ", or an agreement exempted pursuant to section 104(a)(1) of the Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006,".

(f) SUNSET.—The authority provided under subsection (a)(1) to exempt an agreement shall terminate upon the enactment of a joint resolution under section 123 d. of the Atomic Energy Act of 1954 (42 U.S.C. 2153(d)) approving such an agreement.

(g) REPORTING TO CONGRESS.—
(1) INFORMATION ON NUCLEAR ACTIVITIES OF
INDIA.—The President shall keep the appropriate congressional committees fully and currently informed of the facts and implications of any significant nuclear activities of India, including—
(A) any material noncompliance on the part of the Government of India with—
(i) the nonproliferation commitments undertaken in the Joint Statement of July 18, 2005, between the President of the United States and the Prime Minister of India;
(ii) the separation plan presented in the national parliament of India on March 7, 2006, and in greater detail on May 11, 2006;
(iii) a safeguards agreement between the Government of India and the IAEA;
(iv) an Additional Protocol between the Government of India and the IAEA;
(v) an agreement for cooperation between the Government of India and the United States Government arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153) or any subsequent arrangement under section 131 of such Act (42 U.S.C. 2160);
(vi) the terms and conditions of any approved licenses regarding the export or re-export of nuclear material or dual-use material, equipment, or technology; and
(vii) United States laws and regulations regarding such licenses;
(B) the construction of a nuclear facility in India after the date of the enactment of this title;
(C) significant changes in the production by India of nuclear weapons or in the types or amounts of fissile material produced; and
(D) changes in the purpose or operational status of any unsafeguarded nuclear fuel cycle activities in India.
(2) IMPLEMENTATION AND COMPLIANCE REPORT.
—Not later than 180 days after the date on which an agreement for cooperation with India arranged pursuant to section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153) enters into force, and annually thereafter, the President shall submit to the appropriate congressional committees a report including—
(A) a description of any additional nuclear facilities and nuclear materials that the Government of India has placed or intends to place under IAEA safeguards;

(B) a comprehensive listing of—
(i) all licenses that have been approved by the Nuclear Regulatory Commission and the Secretary of Energy for exports and reexports to India under parts 110 and 810 of title 10, Code of Federal Regulations;
(ii) any licenses approved by the Department of Commerce for the export or reexport to India of commodities, related technology, and software which are controlled for nuclear nonproliferation reasons on the Nuclear Referral List of the Commerce Control List maintained under part 774 of title 15, Code of Federal Regulation, or any successor regulation;
(iii) any other United States authorizations for the export or reexport to India of nuclear materials and equipment; and
(iv) with respect to each such license or other form of authorization described in clauses (i), (ii), and (iii)—
(I) the number or other identifying information of each license or authorization;
(II) the name or names of the authorized end user or end users;
(III) the name of the site, facility, or location in India to which the export or reexport was made;
(IV) the terms and conditions included on such licenses and authorizations;
(V) any post-shipment verification procedures that will be applied to such exports or reexports; and
(VI) the term of validity of each such license or authorization;

(C) a description of any significant nuclear commerce between India and other countries, including any such trade that—
(i) is not consistent with applicable guidelines or decisions of the NSG; or
(ii) would not meet the standards applied to exports or reexports of such material, equipment, or technology of United States origin;
(D) either—
(i) an assessment that India is in full compliance with the commitments and obligations contained in the agreements and other documents referenced in clauses (i) through (vi) of paragraph (1)(A); or
(ii) an identification and analysis of all compliance issues arising with regard to 27 the adherence by India to its commitments and obligations, including—
(I) the measures the United States Government has taken to remedy or otherwise respond to such compliance issues;
(II) the responses of the Government of India to such measures;
(III) the measures the United States Government plans to take to this end in the coming year; and
(IV) an assessment of the implications of any continued noncompliance, including whether nuclear commerce with India remains in the national security interest of the United States;
(E)(i) an assessment of whether India is fully and actively participating in United States and international efforts to dissuade, isolate, and, if necessary, sanction and contain Iran for its efforts to acquire weapons of mass destruction, including a nuclear weapons capability (including the capability to enrich uranium or reprocess nuclear fuel), and the

means to deliver weapons of mass destruction, including a description of the specific measures that India has taken in this regard; and
(ii) if India is not assessed to be fully and actively participating in such efforts, a description of—
(I) the measures the United States Government has taken to secure India's full and active participation in such efforts;
(II) the responses of the Government of India to such measures; and
(III) the measures the United States Government plans to take in the coming year to secure India's full and active participation;
(F) an analysis of whether United States civil nuclear cooperation with India is in any way assisting India's nuclear weapons program, including through—
(i) the use of any United States equipment, technology, or nuclear material by India in an unsafeguarded nuclear facility or nuclear weapons related complex;
(ii) the replication and subsequent use of any United States technology by India 31 in an unsafeguarded nuclear facility or unsafeguarded nuclear weapons-related complex, or for any activity related to the research, development, testing, or manufacture of nuclear explosivedevices; and
(iii) the provision of nuclear fuel in such a manner as to facilitate the increased production by India of highly enriched uranium or plutonium in unsafeguarded nuclear facilities;
(G) a detailed description of—
(i) United States efforts to promote national or regional progress by India and Pakistan in disclosing, securing, limiting, and reducing their fissile material stockpiles, including stockpiles for military purposes, pending creation of a world- wide fissile material cut-off regime, including the institution of a Fissile Material Cut-off Treaty;
(ii) the responses of India and Pakistan to such efforts; and
(iii) assistance that the United States is providing, or would be able to provide, to India and Pakistan to promote the objectives in clause (i), consistent with its obligations under international law and existing agreements;

(H) an estimate of—
(i) the amount of uranium mined and milled in India during the previous year;
(ii) the amount of such uranium that has likely been used or allocated for the production of nuclear explosive devices; and
(iii) the rate of production in India of—
(I) fissile material for nuclear explosive devices; and
(II) nuclear explosive devices;

(I) an estimate of the amount of electricity India's nuclear reactors produced for civil purposes during the previous year and the proportion of such production that can be attributed to India's declared civil reactors;

(J) an analysis as to whether imported uranium has affected the rate of production in India of nuclear explosive devices;

(K) a detailed description of efforts and progress made toward the achievement of India's—
(i) full participation in the Proliferation Security Initiative;
(ii) formal commitment to the Statement of Interdiction Principles of such Initiative;
(iii) public announcement of its decision to conform its export control laws, regulations, and policies with the Australia Group and with the Guidelines, Procedures, Criteria, and Controls List of the Wassenaar Arrangement; and
(iv) effective implementation of the decision described in clause (iii); and

(L) the disposal during the previous year of spent nuclear fuel from India's civilian nuclear program, and any plans or activities relating to future disposal of such spent nuclear fuel.
(3) SUBMITTAL WITH OTHER ANNUAL REPORTS.—
(A) REPORT ON PROLIFERATION PREVENTION.—
Each annual report submitted under paragraph (2) after the initial report may be submitted together with the annual report on proliferation prevention required under section 601(a) of the Nuclear Non- Proliferation Act of 1978 (22 U.S.C. 3281(a)).
(B) REPORT ON PROGRESS TOWARD REGIONAL NONPROLIFERATION.—The information required to be submitted under paragraph (2)(F) after the initial report may be submitted together with the annual report on progress toward regional nonproliferation required under section 620F(c) of the Foreign Assistance Act of 1961 (22 U.S.C. 2376(c)).
(4) FORM.—Each report submitted under this subsection shall be submitted in unclassified form, but may contain a classified annex.

SEC. 105. UNITED STATES COMPLIANCE WITH ITS NUCLEAR NONPROLIFERATION TREATY OBLIGATIONS.

Nothing in this title constitutes authority for any action in violation of an obligation of the United States under the NPT.

SEC. 106. INOPERABILITY OF DETERMINATION AND WAIVERS.

A determination and any waiver under section 104 shall cease to be effective if the President determines that India has detonated a nuclear explosive device after the date of the enactment of this title.

SEC. 107. MTCR ADHERENT STATUS.

Congress finds that India is not an MTCR adherent for the purposes of section 73 of the Arms Export Control Act (22 U.S.C. 2797b).

SEC. 108. TECHNICAL AMENDMENT.

Section 1112(c)(4) of the Arms Control and Nonproliferation Act of 1999 (title XI of the Admiral James W. Nance and Meg Donovan Foreign Relations Authorization Act, Fiscal Years 2000 and 2001 (as enacted into law by section 1000(a)(7) of Public Law 106-113 and contained in appendix G of that Act; 113 Stat. 1501A-486)) is amended--
(1) in subparagraph (B), by striking `and' after the semicolon at the end;
(2) by redesignating subparagraph (C) as subparagraph (D); and
(3) by inserting after subparagraph (B) the following new subparagraph:
`(C) so much of the reports required under section 104 of the Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006 as relates to verification or compliance matters; and'.

SEC. 109. UNITED STATES-INDIA SCIENTIFIC COOPERATIVE NUCLEAR NONPROLIFERATION PROGRAM.

(a) Establishment- The Secretary of Energy, acting through the Administrator of the National Nuclear Security Administration, is authorized to establish a cooperative nuclear nonproliferation program to pursue jointly with scientists from the United States and India a program to further common nuclear nonproliferation goals, including scientific research and development efforts, with an emphasis on nuclear safeguards (in this section referred to as `the program').
(b) Consultation- The program shall be carried out in consultation with the Secretary of State and the Secretary of Defense.
(c) National Academies Recommendations-
(1) IN GENERAL- The Secretary of Energy shall enter into an agreement with the National Academies to develop recommendations for the implementation of the program.
(2) RECOMMENDATIONS- The agreement entered into under paragraph (1) shall provide for the preparation by qualified individuals with relevant expertise and knowledge and the communication to the Secretary of Energy each fiscal year of--
(A) recommendations for research and related programs designed to overcome existing technological barriers to nuclear nonproliferation; and
(B) an assessment of whether activities and programs funded under this section are achieving the goals of the activities and programs.
(3) PUBLIC AVAILABILITY- The recommendations and assessments prepared under this subsection shall be made publicly available.
(d) Consistency With Nuclear Non-Proliferation Treaty- All United States activities related to the program shall be consistent with United States obligations under the Nuclear Non-Proliferation Treaty.
(e) Authorization of Appropriations- There are authorized to be appropriated such sums as may be necessary to carry out this section for each of fiscal years 2007 through 2011.

SEC. 110. DEFINITIONS.

In this title:
(1) The term `Additional Protocol' means a protocol additional to a safeguards agreement with the IAEA, as negotiated between a country and the IAEA based on a Model Additional Protocol as set forth in IAEA information circular (INFCIRC) 540.

(2) The term `appropriate congressional committees' means the Committee on Foreign Relations of the Senate and the Committee on International Relations of the House of Representatives.
(3) The term `dual-use material, equipment, or technology' means material, equipment, or technology that may be used in nuclear or nonnuclear applications.
(4) The term `IAEA safeguards' has the meaning given the term in section 830(3) of the Nuclear Proliferation Prevention Act of 1994 (22 U.S.C. 6305(3)).
(5) The term `Indian person' means--
(A) a natural person that is a citizen of India or is subject to the jurisdiction of the Government of India;
(B) a corporation, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group, that is organized under the laws of India or has its principal place of business in India; and
(C) any Indian governmental entity, including any governmental entity operating as a business enterprise.
(6) The terms `Missile Technology Control Regime', `MTCR', and `MTCR adherent' have the meanings given the terms in section 74 of the Arms Export Control Act (22 U.S.C. 2797c).
(7) The term `nuclear materials and equipment' means source material, special nuclear material, production and utilization facilities and any components thereof, and any other items or materials that are determined to have significance for nuclear explosive purposes pursuant to subsection 109 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2139(b)).
(8) The terms `Nuclear Non-Proliferation Treaty' and `NPT' mean the Treaty on the Non-Proliferation of Nuclear Weapons, done at Washington, London, and Moscow July 1, 1968, and entered into force March 5, 1970 (21 UST 483).
(9) The terms `Nuclear Suppliers Group' and `NSG' refer to a group, which met initially in 1975 and has met at least annually since 1992, of Participating Governments that have promulgated and agreed to adhere to Guidelines for Nuclear Transfers (currently IAEA INFCIRC/254/Rev.8/Part 1) and Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software, and Related Technology (currently IAEA INFCIRC/254/Rev.7/Part 2).
(10) The terms `nuclear weapon' and `nuclear explosive device' mean any device designed to produce an instantaneous release of an amount of nuclear energy from special nuclear material that is greater than the amount of energy that would be released from the detonation of one pound of trinitrotoluene (TNT).
(11) The term `process' includes the term `reprocess'.
(12) The terms `reprocessing' and `reprocess' refer to the separation of irradiated nuclear materials and fission products from spent nuclear fuel.
(13) The term `sensitive nuclear technology' means any information, including information incorporated in a production or utilization facility or important component part thereof, that is not available to the public and which is important to the design, construction, fabrication, operation, or maintenance of a uranium enrichment or nuclear fuel reprocessing facility or a facility for the production of heavy water.
(14) The term `source material' has the meaning given the term in section 11 z. of the Atomic Energy Act of 1954 (42 U.S.C. 2014(z)).

(15) The term `special nuclear material' has the meaning given the term in section 11 aa. of the Atomic Energy Act of 1954 (42 U.S.C. 2014(aa)).
(16) The term `unsafeguarded nuclear fuel-cycle activity' means research on, or development, design, manufacture, construction, operation, or maintenance of--
(A) any existing or future reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, plant for the separation of isotopes of source or special fissionable material, or separate storage installation with respect to which there is no obligation to accept IAEA safeguards at the relevant reactor, facility, plant, or installation that contains source or special fissionable material; or
(B) any existing or future heavy water production plant with respect to which there is no obligation to accept IAEA safeguards on any nuclear material produced by or used in connection with any heavy water produced therefrom.

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