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INDIA'S INTERFACE WITH INTERNATIONAL ATOMIC ENERGY AGENCY: A DIPLOMATIC HISTORY

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Abstract

India is recognised by the international community as a responsible nuclear weapon-holding state. It managed to navigate through tough international non-proliferation and disarmament regimes in order to sneak into the hard shell of the nuclear world. Although India had a tremendous requirement for nuclear energy to feed and manage the perilous socio-economic condition of independent India in 1947 (owing to huge poverty and lack of basic amenities), it maintained a strategic posture that was against any nuclear heavy lifting. It campaigned throughout the second half of the 20th century for a more peaceful and disarmed world but, at the same time, it was aware of protracted superpower rivalry which could constrain any major achievement on this front. Hence, while campaigning for a disarmed world through universal disarmament and a non-proliferation regime, it never allowed any kind of selective obligations on its own nuclear program. India was quite particular regarding the mandate of International Atomic Energy Agency (IAEA) which sought to manage and control the entire stock of fissionable materials of countries seeking its assistance for their developmental needs. Sensing the same vulnerability, India neither signed the nuclear Non-Proliferation Treaty (NPT) nor the Comprehensive Test Ban Treaty (CTBT). However, over a period of time did enter into agreements with USA, UK, IAEA and others to strengthen its peaceful nuclear energy production capability.

The IAEA was constituted as a regulatory and enforcement authority which created a regime wherein control over unauthorised use of nuclear materials in general and non-proliferation in particular could be ensured. Hence, IAEA's intention and India's ambitions often came into conflict which ultimately demanded a novel and pragmatic solution.

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This paper tries to explore the diplomatic tussle between India's ambition and IAEA's mandate. It traces the origin of IAEA and India's quest for relative autonomy in the nuclear field since its independence. The paper also discusses the pragmatic arrangement devised to rescue Indo-US nuclear deal in which IAEA's mandate on one hand and the issue of India's ambition on the other was addressed systematically.

Keywords: IAEA, NPT, Nuclear Proliferation, Nuclear watchdog, India.

I. Introduction

The time when India breathed the air of independence in 1947, the world had already entered the atomic/nuclear age. Independent India inherited perilous socio-economic conditions when British India's subjects turned into rightful citizens with fundamental rights guaranteed by the new constitution. This precarious situation was characterised by a staggering 80 percent of its population under acute poverty, a low 3 percent share in world GDP with a major chunk coming from the agricultural sector, and an alarmingly low 12 percent literacy rate, etc. After going through centuries of deprevation, one of the major challenges for this new born nascent nation was to kick start the engine of socio-economic development so that the immense potential of its young (although poor) vibrant population could be realised. To keep this engine moving, India needed fuel which₇ the international community had already discovered, ie. nuclear/atomic energy. India realized the potential of nuclear energy and the role it could play in fuelling the Indian economy in almost every field ranging from producing electricity to modernising agriculture to space exploration.

As early as in 1954, India constituted the Department of Atomic Energy (DAE) which was to be placed under Prime Minister's Office (PMO). One of the primary objectives entrusted to the DAE was the development of applications of radiation technologies in the fields of medicine, agriculture and industry; and nuclear power technology and basic research. In 1958, the Atomic Energy Commission (AEC) (previously known as Indian Atomic Energy Commission) was constituted under DAE through a resolution passed in Parliament. The mandate of AEC was to organise research in atomic science, to train atomic scientists in the country, to undertake prospecting of atomic minerals in India, and to promote nuclear research and its various applications.

Having experienced the innate potential of a nuclear bomb which was used in Hiroshima and Nagasaki towards the end of Second world war by the USA, the international community embarked on a mission to control and manage the production, distribution and use of nuclear energy. The use of 16 kiloton and 21 kiloton of explosive charge for the bomb detonated on Hiroshima and Nagasaki respectively caused the death of around 1,50,000-2,50,000 humans (Goldblat 2019). This extraordinarily destructive figure alarmed the international community of the danger to human existence it can cause. Hence, in the very first United Nation General Assembly Resolution in 1946, Atomic Energy Commission (AEC) was composed to deal with the problem of atomic energy and atomic weapons. The AEC was entrusted, among others, to make specific proposals for the elimination of atomic weapons from national armaments.

Over a period of time the United Nations tried to constitute a solid framework to control the use of atomic energy based on different proposals such as the Baruch Plan, and the Gromyko Plan. Due to asymmetric power position of both superpowers, the United States and the USSR, concrete and acceptable framework could not be adopted. In the first half of the 1950s, force symmetry between two superpowers was quite visible when the USA gained relative equal conventional strength and the USSR achieved an important atomic capability. This provided a propitious moment for gaining some tangible outcome towards arms control. US President Eisenhower delivered the historic 'Atoms for Peace' speech in 1953 which provided a plan to promote disarmament through an indirect route by setting up a regime for a peaceful use of nuclear weapons. Under this plan it was decided that an agency would be set up under the aegis of United Nations to which the atomic powers would contribute fissionable materials. This agency would then help other countries to obtain the benefits of atomic energy. Based on this 'Atoms for Peace' plan the IAEA-was formed in 1956.

II. Origin and Evolution of IAEA

The IAEA, headquartered in Vienna (Austria), was established as a logical outcome of US President Eisenhower's 1953 Atoms for Peace speech delivered at the United Nations General Assembly presided over by then Ambassador of India to UN Vijaya Lakshmi Pandit. At the meet President Eisenhower outlined the following proposal while declaring a need for an international atomic agency:

"The governments principally involved, to the extent permitted by elementary prudence, should begin now and continue to make joint contribution from their stockpiles of normal uranium and fissionable materials to an international atomic energy agency. We would expect that such an agency would be set up under aegis of the United Nations. The ratio of contribution, the procedures and other details would properly be within the scope of the private conversation I referred to earlier..... The atomic energy agency could be made responsible for the impounding, storage and protection of the contributed fissionable and other materials. The ingenuity of our scientists will provide special safe conditions under which such a bank of fissionable material can be made essentially immune to surprise seizure.

The 'Atoms for Peace' plan laid down by President Eisenhower set the ground for the establishment of methods for managing and controlling fissionable materials. There were two ensuing perceptions that drove the world towards a need for an international atomic agency, one was optimistic and the other of pessimistic. Optimism was derived from various technological discoveries enunciating that fissionable material can be allocated to serve peaceful pursuits of mankind. It assumed that experts would be mobilised to apply atomic energy to the needs of agriculture, medicine, electrical energy in power-starved areas of the world, etc. The Pessimistic narrative entailed that IAEA would create a check on further proliferation of fissile materials. Towards this end, the Atoms for Peace speech expected that gradually an attempt would be made to set up a complete and acceptable system of worldwide inspection and control. The statute of IAEA was approved in October 1956 which finally came into force in July 1957. The statute has been amended three times since - in 1963, 1973 and 1989. The Non-Proliferation Treaty (NPT) which was instituted to provide an assurance that nuclear energy is being used for peaceful purposes, sought elimination of nuclear weapons. In this endeavour, IAEA was given a central role under which non-nuclear weapon countries were required to conclude a safeguard agreement with IAEA for the purpose. The safeguard mechanism under IAEA plays a central role in preventing the proliferation of nuclear weapons through the independent verification of a country's compliance with nuclear non-proliferation undertakings. It functions through legally binding agreements concluded between countries and the global nuclear watchdog. One of the IAEA branches, 'The Department of Safeguards' performs the duties and responsibilities as the

world's nuclear inspector, supporting global effort to stop the spread of nuclear weapons. Initially, an ad hoc safeguard procedure was adopted in 1959 for JRR-3 research reactor in Japan (Carlson and Shea 2020). Based on the experience of inspection and technical knowhow in Japan, finally the IAEA Board of Governors approved 'safeguards system' in 1961. Under IAEA statute, three types of safeguard agreements can be concluded. These are: comprehensive safeguards agreements with non-nuclear weapon countries to the NPT; voluntary offer for safeguards agreements with the nuclear weapon countries to the NPT; and item specific safeguards agreements with non-NPT countries. The additional protocol was approved by the IAEA board of Governors in 1997 to supplement the countries' safeguard agreement by providing further information about and access to all parts of a country's nuclear fuel cycle, from mines to nuclear weates.

III. India's Encounter with IAEA and the Nuclear Tussle

India was a recalcitrant member of IAEA that perceived any restrains on the use of its nuclear materials by international community as a new form of economic colonialism (Sullivan 1970). By adopting such a posture India, in the beginning found itself aligning with Soviet Union which perceived IAEA as another western irritant and useless (however, later Russia gave strong support to the concept of IAEA Safeguard among NNWS). Also, India viewed international control in atomic energy as dangerous, discriminatory and as a form of economic and technological colonialism. The tussle between India and IAEA was more pronounced in interpretation, recognition and implementation of the safeguard clause. India perceived it as quite intrusive in the national nuclear power generation program. Primarily, safeguard mechanisms were intended to be employed in order to detect, prevent or limit diversion of nuclear material used in nuclear power reactors from legitimate peaceful uses to illicit production of nuclear explosives. Article 2 of the IAEA statute states, "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" (IAEA).

Putting forth the Indian point of restrained and calibrated approach towards IAEA safeguard mechanism, on 4 May 1956 Prime Minister Nehru told the Indian Parliament:

The Agency should not be in a position to throttle any developments which any country or group of countries undertakes on its own initiative without aid from the Agency. In other words, the Agency should not be put in the position of operating like a cartel;" and "the inspection and safeguard provisions should be reasonable and ensure that any aid given by the Agency is not used directly for furthering a military purpose. The inspection and safeguards should not, however, be so rigorous as to give the Agency a hold on the economic life of the country through control of fissionable material or lead to the development of an unhealthy situation in which States in the world receiving aid from the Agency are put into a different class from those who do not go to the Agency for aid. (Poulouse 1979)

Mentioning the scepticism India carried with respect to IAEA, the then representative of India to the United Nation General Assembly (UNGA) Krishna Menon said on 17 November 1954, "United Nations should not directly or indirectly, find itself in a situation of assisting colonial exploitation" (Sarkar 2022). A series of diplomatic weightlifting done by India at the platform of UNGA and IAEA clearly communicated loud and clear the message from India (years before 1968 NPT) that international cooperation in nuclear matters must be pursued but it should not lead to nuclear monopoly.

The despatch from US Consulate in Bombay to the State Department vindicates India's intentions as purely peaceful despite having the most sophisticated and state of the art nuclear technologies. The despatch of 1961 asserted that India has the ability to produce a nuclear weapon just within two years but it intends not to produce. However, the despatch also reflects a sense of pessimism among the US community due to the fact that India's external security environment was constantly changing for the bad. War with China, unstable relations with Pakistan and increasing China-Pakistan nexus could have altered the security dynamics and changed India's perception of its security needs (NSA, 1961).

The inherent contradiction that we were in the midst of, in international nuclear security architecture, is precisely what Homi Bhabha, the Indian representative to the conference to finalize the statute of IAEA, had predicted. While advocating for the agency's guiding role in accelerating and enlarging the contribution of atomic energy to the health, happiness and peace of mankind and opposing the draft safeguard mechanism along with Sri Lanka, Egypt and Indonesia, H.J. Bhabha asserted that only a universal safeguards system would be acceptable to India and not the one to be imposed only on a group of states, namely those receiving aid from the agency (Sarkar, 2022: 84). Bhabha at that point in time feared that it might give the agency the power to gain control over fissionable material required for future electric power generation and hence the economic life of states might get impacted. Eventually, under NPT, non-nuclear weapon states were forced to conclude the agreement with IAEA, thereby allowing the safeguard to apply practically to all nuclear material used in all peaceful nuclear activities of the state parties to the NPT, except the nuclear weapon states, thereby covering the entire nuclear fuel cycle, i.e., reactors, chemical reprocessing, fabrication, transport and storage. The Indian ambassador the United Nations, VC Trivedi metaphorically stated that "such safeguards were like an attempt to maintain law and order in a society by placing all its law-abiding citizens in custody, while leaving its law-breaking elements free to roam the streets." (Pant and Joshi 2018)

Over a period of time, India has maintained a consistent position on international disarmament and a non-proliferation regime and its own nuclear programme. During the 1970s and 1980s a new dimension of neo-colonialism appeared as India looked at the nuclear export control regimes as technological denial regimes for developing countries to restrain their civilian usage (Sood 2018). India tested its nuclear weapon in 1998 at Pokhran when a series of five nuclear bomb test explosions were conducted (first one being fusion bomb and next four fission bombs) codenamed 'Operation Shakti'. Thereby, Prime Minister Atal Bihari Vajpayee declared India as a nuclear weapon state (GOI, 1998).

"Today at 15.45 hours India conducted three underground nuclear tests in the Pokhran range. These tests conducted today were one with a fission device, a low yield device, and a thermonuclear device. The measured yields are in line with expected values. Measurements have also confirmed that there was no release of radioactivity into the atmosphere 15."

-Atal Bihari Vajpayee, 11 May 1998

Subsequently, nuclear tests by two South Asian countries within a month, terrified the international community of its consequences and internal institutions that had been entrusted with the responsibility of maintaining global nuclear order also got a major shock. The Director General of IAEA issued a statement regretting deeply the nuclear tests by India and Pakistan (IAEA, 1998). He decried the dangerous nuclear arms race and the violation of non-proliferation norms established through and reflected in nuclear non-proliferation treaty which was then signed by 186 countries. Further, putting his faith on the rational being in both the countries, the IAEA Director General, expressed hope towards utmost restrains among both the south Asian states while observing complete adherence to international nuclear norms.

As a response to international criticism to India's nuclear test, India outlined that the fundamental purpose of nuclear weapon is to deter the use and threat of use of nuclear weapon by the adversaries against India and its forces anywhere. It embarked on a global campaign to convince the international community that the intention of nuclear acquisition is not to use it on the battlefield but to deter other nuclear powered states from using nuclear weapon as leverage over India. The Indian Prime Minister Atal Bihari Vajpayee explicated in the Indian Parliament that the Indian decision to acquire nuclear weapons is a result of sheer frustration and an immediate existential security threat emanating from India's northern and north-western countries. The frustration was due to the in-effectuation of over 50 years of disarmament advocacy by the Indian Government. From a 'standstill agreement' proposal of 1954 to 1965 international non-proliferation agreement, multiple Indian proposals at international forums was rejected by the international community. The frustration was further exacerbated by deteriorating security environment in the region which was characterised by terrorism, militancy, missiles and nuclear proliferation and prospects of clandestine wars. Making the intent very clear, Prime Minister Vajpayee stated on 27th May 1998 that "we do not intend to use these weapons for aggression or for mounting threats against any country, these are weapons of self-defence to ensure that India is not subject to nuclear threats or coercion. We do not intend to engage in an arms race" (GOI, 1999).

To ensure transparency at its end, India came up with a nuclear doctrine which, among other things, stated that India has no first-use policy which means India will never be an aggressor but at the same time should nuclear aggression take place against the Indian state or its forces anywhere in the world, India will carry out massive retaliation inflicting unacceptable damage to the aggressor. The Vajpayee Government produced a detailed Indian Nuclear Doctrine in 2003 and important arrangements for the operationalization and implementation of Indian Nuclear capabilities were finalised by the Cabinet Committee on Security on 4th January 2003. The arrangements were as follows -

- Reflecting the purpose and rationale behind the acquisition of nuclear weapons capability, the doctrine clearly delineates building and maintaining credible minimum deterrence.
- In order to ward off any suspicion among the international community, India declared 'no first use' policy. Its posture explained that Indian nuclear weapons will be used only in retaliation against a nuclear attack on Indian territories or Indian forces anywhere.
- This retaliation will be a massive retaliation designed for inflicting an unacceptable damage to the adversary.
- Explaining the political oversight over command and control authority, the doctrine explicates that civilian political authority can only authorise nuclear retaliatory attack through proper nuclear command authority.
- As a matter of principle and as an epitome of a responsible nuclear state, India declared in its nuclear doctrine that it will not use nuclear weapons against a non-nuclear weapon state.
- There is an exception to the above two points. In the event of major attack on India or Indian forces anywhere in the world, by biological or chemical weapons, India retains the option of retaliating with nuclear weapons.
- True to its pledge and years of advocacy for control over nuclear and missile technologies, India declared moratorium on nuclear testing and resolved to put in place strict control over exports of nuclear or missile related technology or materials.

• Finally, India documented what it was advocating for decades – its continued commitment to a goal of nuclear weapons free world through global, verifiable and non-discriminatory nuclear disarmament.

India continued its advocacy of nuclear disarmament and non-proliferation through intense diplomatic campaign (Kumar 2020). It was these solemn advocacies by India that led a marathon diplomatic overture through Jashwant-Talbott talks to clear the ways for discussions over a major defence agreement - Next Step in Strategic Partnership (NSSP) (GOI, 2004). It was the culmination of an understanding built up during the Jashwant-Talbott talks that led to a formalisation of this major agreement. It also opened up a new chapter in India-US relations that is continuing till date. The NSSP agreement strived to expand Indo-US cooperation in three specific areas nuclear activities, high technology trade and civilian space program. This agreement established a solid foundation for Indo-US relations to flourish over the next several decades. Here, it is important to understand that, although Jahswant-Talbott talks failed in its intended objective and didn't fetch any concrete outcome, it did provide an opportunity for India to convey its benign intentions with the sole superpower US.

The partnership gained renewed strength when the Indo-US Civil Nuclear Deal was signed and the international community welcomed India into the league of a responsible nuclear armed nation by granting Nuclear Suppliers Group (NSG) waiver in order to trade in nuclear material even without signing the nuclear NPT. In return, India pledged to separate its nuclear civilian and military programme and accepted IAEA safeguard regime on civilian facilities. The diplomatic overture and negotiation details between India and IAEA have been discussed in the next section. Although India did perceive international safeguard regime discriminatory between nuclear 'haves' and 'have nots', owing to its strong commitment towards non-proliferation and disarmament, till date (January 2021), there are 22 operational reactors in India of which 14 are under the IAEA safeguard as they use imported fuel (Press Trust of India 2019). This brought forth India's clear intention that it wants 'nuclear parity' but

until that happens India cannot subjugate its own nuclear program and thereby strategic nuclear autonomy.

IV. Indo-US Nuclear Cooperation Agreement and IAEA

On 18 July 2005, Indian Prime Minister Dr. Manmohan Singh and President George W. Bush issued a joint statement¹ in Washington D.C. where both were satisfied with the "convergence of interests reflected in a common understanding on the implementation of" the civil nuclear deal. Some of the important take aways from the agreement were-

- The Indo-US Nuclear deal assured India of a consistent supply of nuclear fuel to run the country's nuclear reactors. In doing so, the US incorporated assurances regarding the fuel supply under section 123 of the US Atomic Energy Act. Washington also agreed to support New Delhi develop a strategic reserve of nuclear fuel and to negotiate with the IAEA an India-specific fuel supply agreement.
- 2. Under the agreement, nuclear materials, equipment, sensitive nuclear technology, natural low enriched uranium and special fissionable material, along with heavy water production technology were agreed to be transferred
- With respect to safeguards, India-Specific Safeguard Agreement was signed between India and IAEA under which India put its civilian nuclear reactors under IAEA. Further safeguards were maintained on all the nuclear materials and equipment being transferred.
- 4 Under India's Separation Plan, it was decided that out of 22 thermal power reactors in operation or under construction, 14 reactors will be identified and offered for IAEA safeguards. India decided to place all future civilian thermal power reactors under IAEA safeguards and the sole authority to determine such reactors as civilian remains with the Government of India. The overarching criterion for subjecting a nuclear facility to IAEA safeguard would be its strategic significance in terms of securing India's national security interest².
- 5 The deal committed both parties to mutually transfer information regarding the use of nuclear energy for peaceful purposes. This information pertains to the production and

use of nuclear reactors, fuel cycle activities, and research on various applications, among others.

6 India denied accepting any safeguards on its Prototype Fast Breeder Reactors (PFBR) and Fast Breeder Test Reactors (FBTR) located at Kalpakkam on the basis of its strategic significance.

The Indo-US Nuclear agreement was the basic framework where both India and USA agreed to cooperate on civil nuclear programme in India. In return, India agreed to put its civilian nuclear facility under strict IAEA surveillance through India-IAEA Safeguard Agreement, agreed to institute effective export control system consistence with NSG and pledged to continue its "unilateral moratorium" on nuclear testing. The significance of this Agreement is acknowledged by the fact that this enabled India to break through the hard shell of global nuclear power circle (grant of NSG waiver) and place itself at par with other recognised nuclear weapon states under Nuclear Non Proliferation Treaty (NPT), even without signing the Treaty, in a way effectively mending global nuclear architecture to its own cause.

In August 2007, while assuring the Lok Sabha about the prospects of Civil Nuclear Energy Cooperation with the United States, Dr. Manmohan Singh stated that "the significance of the agreement lies in the fact that when brought into effect, it will open the way for full civil nuclear energy cooperation between India and the United States. We have negotiated this Agreement as an equal partner, precisely because of the achievements of our scientists and technologists in overcoming the barriers placed around us in the past. This is an agreement based on the principle of mutual benefits. ...". (GOI, 2007) Roughly, a month before the final announcement of the fruition of Indo-US Civil Nuclear Deal, Dr. Manmohan Singh visited the United States. While addressing the Indian community in the USA, the Prime Minister praised the leadership of President George Bush for strengthening the relationship between the two great nations. On the question of the relevance of the civil nuclear deal, he said, "thanks to the leadership of President Bush and the friendship of the people of the United States we are on the verge of securing a new status in the global nuclear order. India will be liberated from the constraints of technological denial of 34 years. It will add an important strategic pillar to our bilateral partnership. We will widen our clear energy options". (GOI, 2008)

As per the then Foreign Secretary Shiv Shankar Menon, "after getting USA on board, task at IAEA became quite smooth." (Menon 2015) The most contentious negotiation pertained to the safeguard clause of IAEA. Once the United States abandoned its demand that India, being non-nuclear weapon state under US law (Atomic Energy Act 1954) and nuclear NPT, accepts safeguards on all its nuclear facility, most of the impasse were resolved. Other points of contentions included whether or not fast breeder reactors would be considered civilian. India's position on this was outlined by Department of Atomic energy which had consistently included them in civilian category but have argued that they represent 'proprietary technologies' and therefore could not be safeguarded. Although India retained the right to decide which nuclear facilities were to be put under IAEA safeguard, it made it look acceptable when it meant that in any case, should foreign-origin fuel supplies enter the fast breeder reactors after reprocessing, they would automatically fall under safeguard.

In order to adhere to the rules of nuclear commerce under Indo-US civil nuclear cooperation, India and IAEA concluded an 'India specific' safeguard agreement under which the civilian facilities that are decided by India will be placed under IAEA safeguard. On 3rd March 2009, IAEA approved an additional protocol to India's safeguard agreement. Despite not being a member of NPT, India entered into an 'India Specific' agreement with IAEA allowing it to place its civilian nuclear reactors under international safeguards while keeping others for its own nuclear weapons effort. This paved the way for Nuclear Suppliers Group (NSG) to grant India a waiver. Hence, this agreement became instrumental for 45 NSG nations to adopt an exception and grant NSG 'waiver' for sharing nuclear material and technology.

Before that IAEA also approved a Draft Additional Protocol with India which seemed markedly different from the 1997 version of the Additional Protocol (Crail 2008). The provisions in the Daft Additional Protocol submitted by India omitted key provisions regarding types of information provided by India to the agency and access given for inspection. As mentioned in the previous section, India accepted the safeguard supervision over the facilities that are using foreign supplied fissionable materials. Under this arrangement 14 out of 22 operational reactors are under IAEA's safeguard as they use imported fuel. This reflects India's genuine commitment towards a more peaceful and disarmed world.

Granting NSG waiver to India indicated international legitimisation of India's admission into the global nuclear order, a phenomenon Malik calls 'nuclear normalcy' or 'nuclear mainstreaming' (Malik 2019). He further condemned the discriminatory and exceptional behaviour of the US and its allies towards Indian nuclear enterprises as violative of the spirit of NPT. Pakistan has complained about the nuclear mainstreaming practices of the United States, specifically to India. It regards India and Pakistan, both NPT outlier nuclear weapon states, to have equal opportunity and treatment towards nuclear mainstreaming.

V. Convergences and Future Prospects

Riding on the spotless image of a responsible nuclear power and a proponent of nonproliferation and nuclear disarmament, India has developed significant convergences with the IAEA over time (IAEA. 2020). In an attempt to strengthen global nuclear liability regime, India ratified the Convention on Supplementary Compensation for Nuclear Damage, a multilateral treaty aimed at compensation and liability for damage caused by a nuclear incident (IAEA. 2016). The Convention along with its protocols came into force in 2015. These convergences are reflected in India joining IAEA Response and Assistance Network (RANET). RANET is a group of States which will be instrumental in case of nuclear or radiological emergencies, to offer assistance to mitigate their consequences. This arrangement helps the member countries to seek, and IAEA to respond quickly in mobilizing teams upon request made by the countries affected by an emergency. Under this framework, states can register their response capabilities and preparedness in case of any eventuality. IAEA'S Incident and Emergency Centre head, Elena Buglova stated, "India's emergency preparedness and response capabilities can now be offered to countries during an emergency, if these countries ask for assistance. This shows a strong commitment by India to strengthen the international framework for nuclear and radiological emergency preparedness and response". (IAEA 2020)

One of the prominent components of IAEA's inspection and verification mechanism is its regulatory oversight on nuclear power plants across countries. The framework under the

Integrated Regulatory Review Services (IRRS) ensures that a country's regulatory infrastructure is aligned with the IAEA nuclear safety standards. IRRS Mission was hosted by the Atomic Energy Regulatory Board of India this year to review nuclear infrastructure and safety measures (IAEA 2022). Ramzi Jammal, IRRS Team Leader stated, "India and the AERB should take pride in the achievements they have accomplished, and we encourage the AERB to continue their improvements to ensure that the public, workers and the environment remain protected." (IAEA, 2022) The team also praised the integration of the regulatory process into an online platform as per the safety norms of IAEA. India has already integrated most of the nuclear safety and safeguard components with the various mechanisms of IAEA including Response and Assistance Network, Additional Protocol, and others.

VI. Conclusion

Since Independence, India has been one of the consistent advocates of non- proliferation and disarmament. Owing to its geographical complications, socio- political vulnerability, material incapacity and international political environment, India adopted a non-aligned external posture and focused on internal nation building. Advocacy of a peaceful world and leadership of the so called 'Third World' got a major jolt by an unexpected aggression by China in 1962 which caught India incredibly unprepared (Dutta 2018). This was also the time when the international regime (IAEA) meant for controlling and managing the use of fissionable materials was in its initial stage of implementation. The race for prioritization between soft imaging and hard vulnerabilities in international relations is often won by the latter. Hence, along with maintaining a sustained narrative on disarmament and non-proliferation, India resisted any kind of obligation over its nuclear program which could have prevented India from addressing its unique security challenges. Although a vocal critic of the discriminatory safeguard regime, India allowed safeguards in a pragmatic manner whenever energy requirements demanded. It was this intentional commitment that helped India when it tested its nuclear weapon codenamed 'Operation Shakti' in 1998. The United States approved India as a responsible nuclear weapon state and its intentions as reliable when they signed the Indo-US Civil Nuclear Deal. The 'India specific' safeguard agreement was concluded with IAEA which has expanded over time. The relationship between India and IAEA is expected to be relatively smooth for an unforeseeable future as the reliability of India's nuclear intention is backed by international legitimacy.

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