

# **US 123 AGREEMENTS WITH INDIA: IMPLICATIONS FOR NUCLEAR NON-PROLIFERATION TREATY**

By

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## DEDICATION

I dedicate this achievement, the completion of my degree, to the memory of my beloved father, Youssaf Khan. My journey to this point has been marked by countless challenges and triumphs, and it is his unwavering support, guidance, and love that have carried me through it all.

My father, Youssaf Khan, was the driving force behind my pursuit of education. His belief in the power of knowledge and his sacrifices to provide me with the opportunities I needed to succeed have been the foundation of my academic journey. Though he is no longer with us, his spirit, wisdom, and love continue to inspire and guide me

Though he is no longer with us in person, his spirit and influence remain alive in my heart and every step I take in life. This degree is a testament to the enduring legacy of his wisdom and the values he instilled in me.

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## List of Abbreviations

CEND.....	Creating the Environment for Nuclear Dis-armaments
CPPNM.....	Convention on the Physical Protection of Nuclear Material
CRS.....	Comprehensive Ranking System
CTBT.....	Comprehensive Nuclear-Test-Ban Treaty
DOE/NNSA.....	Department of Energy and National Nuclear Security Administration
FMT.....	Fissile Material Treaty
FMCT.....	Fissile Material Cut off Treaty
IAEA.....	International Atomic Energy Agency
JCPOA.....	Joint Comprehensive Plan of Action
NATO.....	North Atlantic Treaty Organization
NPT.....	Non-Proliferation Treaty
NSG.....	Nuclear Supplier Group
SALT 1.....	Strategic Arms Limitation Talks I
SALT 2.....	Strategic Arms Limitation Talks II
SSS and NP.....	Strategic Stability and Non-Proliferation
UN.....	United Nations
US.....	United States
USSR.....	Union of Soviet Socialist Republics
UK.....	United Kingdom



## Abstract

The 123 Agreement established the legal framework for significant transfers of nuclear material or equipment of United States to other countries. This thesis establishes that the Indo-US Nuclear deal has challenged the efficacy of the NPT and established nuclear non proliferation norms and orders. The primary research method for this study is qualitative while deductive reasoning is used by the researcher. Moreover, the objectives of the research are to comprehend the impact of 123 agreement on NPT, explain policy impact of 123 agreements on other Non NPT states. The realism lens is used to explain the argument. Data is collected from secondary resources including books, research papers, journals and articles. The agreement has raised broader questions about the criteria-based approach to emerging nuclear aspirants and the need for strengthening global governance in the nuclear field. Moving forward, it is important for all states to work together to strengthen nuclear governance regimes for safety, security, and non-proliferation and to ensure that all states adhere to their rights and responsibilities. The thesis aim to enhance the NPT framework by strengthening and reconsidering the review process, promoting dialogue, improving safeguards, fostering international cooperation, and adapting to evolving geopolitical dynamics, thereby encouraging responsible behavior.

## Introduction

The US civil nuclear cooperation agreements under the provisions of section 123 (Atomic Energy Act), which was often known as 123 agreements, were first offered by President Eisenhower as a means for the US to project influence globally while also attempting to limit nuclear proliferation.<sup>1</sup> The 123 Agreement established the legal framework for significant transfers of nuclear material or equipment and nuclear cooperation of United States with other countries.

In 1953, Eisenhower created a program known as Atoms for Peace in response to the fear of nuclear proliferation and the expanding Soviet influence.<sup>2</sup> This program aimed to ensure nuclear energy development in a safe manner as well as the rise of US foothold. This also guaranteeing that the US had a stronger grip over the dispersal of nuclear technology. The Atomic Energy Act is in direct conflict with the prior 1946 Atomic Energy Act, which banned the trading of any nuclear energy.<sup>3</sup>

Globally, the Atoms for Peace Program is seen as a crossroads for state-to-state trading in energy and nuclear technology for peaceful purposes. The organization was meant to oversee and act as a watchdog over the peaceful exchange of nuclear material. In 1957, the International Atomic Energy Agency (IAEA) was established as a result of this proposal<sup>4</sup>. As a watchdog, this independent worldwide authority was accountable for ensuring the peaceful utilization of nuclear energy while additionally regulating and supervising nuclear technology and materials. Soon after the creation of this organization and the ongoing expansion of nuclear weapon nations such as the United Kingdom, China, and France by the early 1960s, a concern of nuclear weapon proliferation was seen. The United States signed the inaugural 123 agreement in 1955 to support Turkey with nuclear development.

Until 1967, the US had 34 deals,<sup>5</sup> three-quarters of which were meant solely for research purposes. Early participants included Israel, Iran, India, Pakistan, South Africa, Venezuela,

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<sup>1</sup> Karbassi Shayan, 'Civil Nuclear Cooperation Through 123 Agreements: A Primer', Lawfare Institute, October 15, 2020. <https://www.lawfareblog.com/civil-nuclear-cooperation-through-123-agreements-primer>

<sup>2</sup> Munro, A.. "nuclear proliferation." Encyclopedia Britannica, November 22, 2018. <https://www.britannica.com/topic/nuclear-proliferation>.

<sup>3</sup> Ibid.

<sup>4</sup> Roehrich, Elisabeth. "The Cold War, the developing world, and the creation of the International Atomic Energy Agency (IAEA), 1953–1957." *Cold War History* 16, no. 2 (2016): 195-212.

<sup>5</sup> Rosenberg, David Alan. "The origins of overkill: Nuclear weapons and American strategy, 1945–1960." *International security* 7, no. 4 (1983): 3-71.

and Vietnam. A few of such early deals have come under criticism over the years for their role in unintentionally accelerating nuclear weapons programs across the world.

Considering the nuclear proliferation threat, the US headed discussions for a treaty that would provide more strength and promote the IAEA's goals. In 1968, the Treaty on the Non-Proliferation of nuclear weapons (NPT) was officially made open to ratification<sup>6</sup>, and was ratified over two years. The NPT strives to promote and provide the right to peaceful use of nuclear technology, to promote nuclear non-proliferation, and to include the objective of nuclear disarmament.

The NPT has created a bar between the nuclear weapon states and non-nuclear weapon states. The NPT created a bar between haves and haven't by giving de jure status only to those nuclear weapon states which acquired nuclear technology before 1968 and it bought access to the accusation of nuclear weapons to all other states and those states that adhered to the NPT that only be recognized if they are non-nuclear weapon states. NPT has three pillars which are non-proliferation, peaceful use of nuclear energy, and disarmament.

Under article 1 of NPT, the nuclear armed states which have got de jure status are bound to not transfer the nuclear weapons, explosives or any assistance in any way to those states who are aspiring to acquire nuclear technology.<sup>7</sup> It insist the non-nuclear weapon states must pledge to accept the IAEA safeguards in order to verify that their nuclear use is only for peace purpose.

The NPT Article IV gives the rights of peaceful nuclear technology trade to NPT signatory states. It gives the right to develop nuclear energy for peaceful purposes and to benefit from international cooperation in this area for all the signatories members and encourage the cooperation of nuclear trade between them for peaceful purposes.

Under Article VI of the NPT, all Parties undertake to pursue good-faith negotiations on effective measures relating to cessation of the nuclear arms race, to nuclear disarmament, and to general and complete disarmament.<sup>8</sup>

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<sup>6</sup> Goldschmidt, Bertrand. "The negotiation of the non-proliferation treaty (NPT)." IAEA bulletin 22, no. 3/4 (1980): 73-80.

<sup>7</sup> Goldschmidt, Bertrand. "The negotiation of the non-proliferation treaty (NPT)." IAEA bulletin 22, no. 3/4 (1980): 73-80.

<sup>8</sup> Rietiker, Daniel. "The meaning of article VI of the Treaty on the Non-Proliferation of Nuclear Weapons: analysis under the rules of treaty interpretation." Nuclear Non-Proliferation in International Law-Volume I (2014): 47-84.

Considering all the efforts made by NPT for the goal of nuclear disarmament but the NPT treaty didn't set any timeline to achieve the goal of disarmament. That's why till date NPT didn't achieve its goal of disarmament. Furthermore, the NPT didn't stop the proliferation nor the motivation of several states to acquire the nuclear weapons. This must be the disappointment with the limited progress on nuclear disarmament, where the five de jure nuclear weapons states still have 13,400 warheads in their combined stockpile. Between 1955 and 1974, the United States became India's major provider of nuclear technology and materials. Additionally, the US provided training for Indian scientists and loans and grants of \$93 million through Atoms for Peace Program. In 1974, India exploded its first nuclear weapon.<sup>9</sup>

After India's explosion of a nuclear device in 1974 which reveal the fact that nuclear materials and technologies gain under the shadow of peaceful purposes could be diverted to build nuclear weapons. The threat of nuclear proliferation under the shadow of peaceful nuclear technology trade led the nuclear supplier states to establish nuclear supplier group (NSG) in 1975.

NSG aims to prevent nuclear exports for being used to make nuclear weapons that was taken for commercial and peaceful purposes. To guarantee that their nuclear technology imports are not used to create nuclear weapons, NSG member nations are required to precede nuclear commerce with NSG member states alone, and a state must be an NPT signatory to join the NSG.

India is a Non-NPT party and is aspiring to NSG membership, for that it must need to follow the track of NPT treaty to approach the NSG group or nuclear trade for the purpose of nuclear technology for peaceful uses. But instead of the global given path for NSG the US gives a waiver to India through 123 agreements. US passed a law in its own parliament then took approval from IAEA and on the basis of IAEA approval it also took approval from NSG too to conduct this deal with India.<sup>10</sup>

The US waiver to India had a reason that is the shift of Washington DC tilt from Islamabad to New Delhi in Post-Cold War era by George W. Bush administration was to add India to Western block in order to contain the rising China. For this reason, Bush offered India a civil

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<sup>9</sup> Peter R. Lavoy, "The Enduring Effects of Atoms for Peace," Arms Control Association | The Authoritative Source on Arms Control Since 1971, last modified May 19, 2021, [https://www.armscontrol.org/act/2003\\_12/Lavoy](https://www.armscontrol.org/act/2003_12/Lavoy).

<sup>10</sup> Mirza, Muhammad Nasrullah, and Syed Adnan Athar Bukhari. "NSG Membership for Non-NPT NWS: Criteria and Prospects." *Journal of Security & Strategic Analyses* 3, no. 2 (2017): 66-89.

nuclear technology and access to uranium which was needed for Indian nuclear power reactors. Hence, a nuclear deal 123 agreement was signed between India and US. The access to the NSG and nuclear trade for the peaceful purpose is only limited to the countries that are signatories of NPT but India is not a signatory of NPT.

This special waiver of US to India not only hit the spirit and norms of the NPT but also violates the laws of NPT by bypassing the general given path to nuclear trade for peaceful purpose. Bypassing other countries that are in a same row with India that is non-signatory of NPT (Pakistan, Israel and North Korea) only giving India a special status is a big question to the NPT regime.

The Critics in the West correctly raised concerns. First, the deal violated the spirit of the NPT. The NPT has successfully discouraged several states that had considered the developing of nuclear weapons and has even led a few of them to cancel their programs that were already underway. The success of the NPT was achieved in pass through a twofold promise, that those nations that has nuclear weapons will give them up, and that these same nations will refuse to share nuclear technology and fuel with countries that refuse to sign the NPT. Two nations, India and Pakistan (and Israel), openly denied NPT and became the non-signatories. Hence, the US deal with India was actually seen as a blow to the NPT regime.

Indo-US deal had left a strong impact on NPT. This deal not only violated the guidelines of NSG but also the norms of NPT. NPT articles suggest no nuclear proliferation with a state that is not a member to the NPT but this deal is an open challenge to the guidelines of the NPT. India had eight reactors that are not under IAEA's safeguards.<sup>11</sup> Further there is no separation between the civilian and military reactors of India. So how the transparency and safeguards will be guaranteed. There will be high risks for divergence of technology for military purposes which increase the risk of proliferation of nuclear technology. This deal can motivate other nuclear weapon aspiring states to violate it too.

One of the blows to the NPT regime is the deal with India. At first, no impact was seen as the deal meant to use the fuel and technology strictly for civilian purpose and electricity production. But with time, it ended up in an arm race between India and Pakistan. The India's side gets clear by the writing of Charles D. Ferguson, president of federation of American scientists, in arm control that India was short of uranium. If nuclear deal were to fall through,

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<sup>11</sup> Robertson, Kalman A., and John Carlson. *The Three Overlapping Streams of India's Nuclear Programs*. Cambridge, MA: Belfer Center for Science and International Affairs, Harvard Kennedy School, 2016.

India would be forced to stop running about half of its indigenous fuel reactors or only operate its fleet at approximately 50 percent capacity.<sup>12</sup> It would also have to choose between shortchanging its civilian energy program and limiting its nuclear weapons. Now by granting this access to uranium, India can divert its uranium to military purposes without fuel detracting from civilian programs.<sup>13</sup> For this uranium supply to India, US has also pressurized nuclear supplier groups to have agreements with them and Australia, France, Russia, Kazakhstan are among the uranium supplier to them. Initially, it evoked only muted criticism from non-proliferation community as US and foreign experts hoped to press India for non-proliferation concessions. But the hopes faded, global nonproliferation are undermined being the US nuclear trade with India, a state that has already tested nuclear weapons and never signed the NPT. Another fear of the deal is the freeing up of domestic uranium and its use by India for weapons program and the Arm race between two rival states India and Pakistan.

This deal has created several concerns for the new aspirants in the same row with India i.e., Pakistan. One, since 2008, the NSG waiver has mainstreamed India, thereby granting it accesses to the global technological market. In this backdrop, India is acquiring all range of technologies from all over the world for its socio-economic growth and military modernization; two, this deal has strengthened regional asymmetry in South Asia, thus disturbing regional military balance; three, this NSG waiver to India has deepened mistrust and security dilemma between India and Pakistan on the one hand and Pakistan and the U.S. on the other hand; four, despite its consistent efforts, Pakistan is in technological denial at the global level. Pakistan needs technologies for its research and development and socio-economic growth to uplift standards of common masses and local people but Pakistan was not granted any allowance. The climate change led threats necessitate Pakistan's access to the global technological market. Thus, a criteria-based approach will be needed to accommodate all aspirants in the NSG and rescue the NPT from demise. The debate on the NSG membership criteria has become more relevant than ever before. Therefore, this study aims to investigate as to how NSG waiver under the 123 agreement impact other non-NPT states aspiring for NSG membership and how can NPT be rescued and a new criterion defined for the future relevance of the NSG and NPT.

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<sup>12</sup> Etzioni Amitai, 'The Darker Side of the USA-India Nuclear Deal', *The Diplomat*, February 13, 2015. <https://thediplomat.com/2015/02/the-darker-side-of-the-u-s-india-nuclear-deal/>

<sup>13</sup> Bernstein, Paul I., and Nima Gerami. Proliferation risks of civilian nuclear power programs. National Defense University, Center for the Study of Weapons of Mass Destruction, 2012.

## Research Problem

Since India is a Non-NPT state and it should follow the track of NPT treaty to approach the NSG group or get access to the global market for peaceful uses of technology. But instead of the global given path for NSG, the US offered a waiver to India through 123 agreement by passing a law in its own parliament then took approval from the IAEA and NSG to conduct this deal with India. This special waiver of US to India not only hit the spirit and norms of NPT but also violates the laws of NPT by circumventing the general given path to nuclear trade for peaceful purpose. Bypassing other countries that are in a same row with India that is non-signatory of NPT (Pakistan, Israel and North Korea) only giving India a special status is a big question to the NPT regime. This study investigates that when international governance is present, and laws are present then why putting these all aside, the US unilaterally gave a special status to India and 123 agreements has Impacted the NPT Treaty and its future relevance.

## Research Objectives

- To comprehend the impact of 123 agreement on NPT
- To understand the policy impact of 123 agreements on other non NPT states.
- To understand how NPT will remain relevant in the future.
- To understand policy recommendations for US and Non NPT states on the NSG waiver deliberating as to how such kind of waiver can become more consistent to current realities on legal parameters.

## Research Questions

1. How has 123 Agreement impacted the credibility of Non-Proliferation Treaty?
2. How will 123 Agreement impact other non-NPT states aspiring for NSG membership?
3. How breaches in the NPT can be bridged to stabilize the future nuclear order?
4. How NSG waiver offer to India under the 123 agreement can be made more legitimate and consistent to current realities.

## Literature review

Literature has been examined on US 123 Agreement and NPT. The NPT has been seen as a milestone in international treaty that has role in hindering the propagation of nuclear arsenals and technology, to encourage collaboration in the peaceful application of atomic energy and

complete nuclear disarmament. This represents the only unbreakable multilateral commitment to the goal of disarmament by nuclear weapon states. Opened for signature in 1968 which was indefinitely extended on 11th May, 1995, this treaty came into existence in 1970. The total of 191 states including the five nuclear weapon states have signed it. More countries have ratified the NPT than any other arms limitation or disarmament agreement, a testament to this treaty's significance.

This treaty ensures a safeguard system under the responsibility of the international atomic energy agency (IAEA) to further strengthen the role of non-proliferation and take measures among the parties. This is basically to verify compliance with the treaty through inspections by IAEA. This treaty enhances cooperation and equal access to this nuclear technology for all states parties while safeguarding prevents the diversion of fissile material for weapon use.

Rizwana Abbasi argues that "Most non-proliferation issues are viewed from the beginning as a system level interaction caused by states a relative interests and global powers' behaviour. The NPT's inadequate framework, as well as NWS behavior (non-compliance with non proliferation and disarmament commitments and its influence on the NPR), has a direct impact on state behavior at the domestic level.<sup>14</sup>

Another strategic scholar Mark Hibbs raises different questions on the efficiency and effectiveness of NPT. Mark argues that there is uncertainty in the NPT regime regarding the balance between the NPT states and Non NPT states. Mark also questions the NPT value and position for a Non NPT state to qualify for the participation in NSG and the risk for admitting Non NPT states. The NPT current biased role and the emerging threats of proliferation around the world put a question mark on the non-proliferation treaty.<sup>15</sup>

Rebecca Johnson talks about the future uncertainty of NPT regime and its effectiveness. The challenges that NPT regime has to face in future will definitely question the sustainability of this treaty and its effectiveness. The gradual withdrawal regarding safety in terms of designing a world free of nuclear weapons may be more challenging. A growing curiosity among nations in new techniques and initiatives, such as considering a nuclear weapons convention as a possible goal for the future. Johnson discusses the obstacles and choices for the non-proliferated regime, concluding that efforts to halt future proliferation will increasingly focus on reshaping norms and rules to pave

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<sup>14</sup> Rizwana Abbasi, "Nuclear Energy Security: Emerging Trends and Pakistan," Policy Perspectives: The Journal of the Institute of Policy Studies 13, no. 2 (2016), doi:10.13169/polipers.13.2.0167.

<sup>15</sup> Hibbs Mark, 'Towards Nuclear supplier group Policy for States Not Party to the NPT', Carnegie Endowment for International Peace,2016



the way for the negotiation of a new international nuclear security agreement, that relies on a verifiable mechanism that would ban and abolish nuclear weapon ownership and use.<sup>16</sup>

John Carlson argues about the current status of NPT that the nuclear non-proliferation treaty is the major step towards global non-proliferation regime, but the question is that the NPT is still relevant or not?

John went on to say that the relevance of the NPT has been lost as a result of the lack of progress in nuclear disarmament, which raises criticism and calls into question the NPT's validity and standing. "While it is understandable to be frustrated by nuclear-weapon states' failure to meet their NPT disarmament obligations, political attacks on the NPT itself are extremely short-sighted." Non-proliferation and nuclear disarmament are closely interwoven; there will be no disarmament if there is no trust in non-proliferation, and undermining the non-proliferation regime benefits no one. The Treaty on the Prohibition of Nuclear Weapons was negotiated in response to the absence of disarmament initiatives. Nuclear disarmament necessitates a joint and collaborative strategy by nuclear-armed and non-nuclear-weapon states. A strong effort and struggle are needed to highlight the issues.<sup>17</sup>

Rizwana Abbasi and Sufian Ullah in their work argues that the growing instability in the international environment between the two by birth rivals India and Pakistan have shift their strategic priorities. The current security dynamics, changing conflicts structure and the imbalance in the power cycle of Asia have increased the states reliance on Arms race. In such condition it's difficult to think about the NPT goal of disarmament. The crisis of disarmament and the race of nuclear arms has increased the risk of strategic stability. The disarmament efforts would be undermine if steps not been taken to resolve the tension in the region.<sup>18</sup>

The strategic scholar Rizwana abbasi argue about the structure of the non-proliferation treaty and its relevancy. Abbasi talks about the failure of NPT treaty to not encircle the states that are not NPT signatories till date like India, Pakistan, Israel and North Korea. Abbasi argues that Pakistan had also raised reservations on dubious role of NPT for its selective preference

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<sup>16</sup> Johnson Rebecca, "Rethinking the NPT's Role in Security: 2010 and Beyond." *International Affairs* (Royal Institute of International Affairs 1944-) 86, no. 2 (2010): 429–45. <http://www.jstor.org/stable/40664075>.

<sup>17</sup> Carlson John, 'Is the NPT still relevant? – How to progress the NPT's disarmament provisions', *Journal for Peace and Nuclear Disarmament*, 2(1), 97–113, 2019. <https://doi.org/10.1080/25751654.2019.1611187> [Taylor and Francis Online], [Web of Science ®], [Google Scholar]

<sup>18</sup> Abbasi Rizwan ,Ullah Sufian,'Rising Strategic Instability and Declining Prospects for Nuclear Disarmament in South Asia – A Pakistani Perspective', *Asian Journal of Peacebuilding* February 7, 2022. [https://ipus.snu.ac.kr/eng/wp-content/uploads/sites/2/2022/02/A207\\_Rizwana-Abbasi-and-Sufian-Ullah.pdf](https://ipus.snu.ac.kr/eng/wp-content/uploads/sites/2/2022/02/A207_Rizwana-Abbasi-and-Sufian-Ullah.pdf)

of nonproliferation. This could be because of the influence of US. Furthermore, article also codes the Pakistan foreign secretary during the movement of Pakistan-US strategic dialogue where Pakistan had cleared its stance that it will not sign the NPT treaty. Abbasi argues that this statement of Pakistan raised question on NPT that what's the reason of the failure of NPT in convincing Pakistan to sign it. Is the NPT relevant in near future? In addition, Abbasi argues that the NPT treaty needs some revisions to meet the demands of 21<sup>st</sup> century otherwise the ongoing violations of NPT, the increasing interest of states to acquire nuclear weapons and the proliferation along with the failure in disarmament is going to increase further. If the necessary steps and revisions in the treaty and equal principals for all didn't adopt by the NPT.<sup>19</sup>

Another Nuclear Analyst Tariq Osman Hyder argues about the Indo-US nuclear deal, it is the violation to the international community and to the non-proliferation treaty. It violates the norms and laws of NPT. It not only violates the NPT guidelines but also challenges the grace of NSG member states. After the Indo-US deal and the special status given to India by US through 123 agreement by undermining the NPT and NSG guidelines, it is now obvious to imagine the shift in India's behavior towards Pakistan which is not only disturbing the balance in South Asian region but also boost up the arms race between India and Pakistan. If the process of nuclear discrimination and exceptions proceeds along with the selected preference by non-proliferation treaty with the aim by few countries to clear the path of India towards NSG membership, it creates a clear imbalance the region. The consequences for this act would be very serious and multidimensional. Because if this happens then India would always block any way coming to Pakistan's interest of getting NSG membership. He argues that Pakistan as a state is just hoping to picture the non-discriminatory global non-proliferation treaty which is working only on its principles and is not influenced by any powerful state.<sup>20</sup>

Lewis A. Dunn in his work regarding NPT talks about the non-proliferation treaty failure for not getting its primary objectives of disarmament and nuclear non-proliferation.<sup>21</sup>For that he “also puts forward some specific proposals for strengthening the NPT and its implementation,

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<sup>19</sup> Abbasi Rizwana,' Why the NPT needs a makeover',Dwan News Paper,June 14,2015.<https://www.dawn.com/news/1187551>

<sup>20</sup>Osman Tariq,' Indo-US Nuclear Deal and Pakistan the Years Ahead', Policy Perspectives Vol. 10, No. 2 (2013) <https://www.scienceopen.com/hosted-document?doi=10.2307/42909310>

<sup>21</sup> Dunn A Lewis,' The NPT Assessing the Past, Building the Future',Monterey Institute of International Studies,James Martin Center for Nonproliferation Studies. Nonproliferation Review, Vol. 16, No. 2, July 2009. <https://www.tandfonline.com/doi/abs/10.1080/10736700902969638>

with a view to the debate and decisions at the upcoming 2010 NPT Review Conference. A concluding section turns explicitly to the 2010 NPT Review Conference and proposes pursuit of agreement on three NPT Action Plans: one for nonproliferation, one for peaceful uses, and one for nuclear disarmament.

The nuclear strategic scholar Mark Hibbs argues that not only by getting membership of NSG the India will have a strong influence over the region but also this membership will question the NSG itself. The NSG treaty has been beast with the relationship of India's interest and desire to join NSG through the US 123 agreement. This desire of India will give dual benefit to the Indian strategic importance. One key benefit is the India's Nuclear program which will gain an enamors boost through this agreement and the second one is Indian role in international politics because being a member of NSG is not only getting nuclear technology for civil programs but it also boosts up your military programs as well.<sup>22</sup>

Manseok Lee and Michael Nacht Argues in their work regarding NPT. It focuses on the goals and objectives of nuclear non-proliferation treaty which has failed to achieve primary goals of nuclear non-proliferation, nuclear arms disarmament and the fluent trade of nuclear technology for the peaceful purposes. There are multiple challenges faced by the NPT, including the continued proliferation efforts by the states, nationalism, great power competition, the spread of nuclear technology, the increasing burden on the IAEA, and polarization among NPT member states. It is obvious that when all the elements work together then the effectiveness of the non-proliferation treaty is likely to decrease. Unfortunately, the international community has not adopted the primary measure to tackle such issues.<sup>23</sup>

### Research Gap

This literature does not talk exclusively about the impact of 123 Agreement on NPT. All the literature talks about the impact of 123 Agreements on regional strategic stabilities on Pakistan and India relations and Pakistan's National security etc.

- Although there is a lot of literature on impact of this deal on India Pakistan strategic stability or South Asian strategic stability. But the impact of this deal on NPT particular is missing.

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<sup>22</sup> Hibbs Mark, 'Eyes on the prize: India's pursuit of membership in the Nuclear Suppliers Group', *The Nonproliferation Review*,. Volume 24, Issue 3-4, 2017

<sup>23</sup> Lee Manseok, Nacht Michael, 'Challenges to the Nuclear Non-Proliferation Treaty', *Strategic Studies Quarterly*, Fall, 2020 [https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-14\\_Issue-3/Lee.pdf](https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-14_Issue-3/Lee.pdf)

- No exclusive literature is available on impacts of 123 Agreement, its relevance, efficacy, and significance of NPT.
- The literature is silent about alternatives to membership of Non NPT states which are seeking to participate in the NSG.

## Hypothesis

The US unilateral NSG waiver to India has led to increase proliferation trends thereby undermining the legitimacy of the NPT.

## Theoretical Framework

The Realism theory is a prominent international relations theory<sup>24</sup> that emphasizes the role of power, state interests, and the competitive nature of international politics. It posits that states are rational actors that prioritize their own security and survival in an anarchic international system. Applying Realism theory to the thesis allows for a nuanced analysis of the 123 Agreement and its impact on the NPT through the lens of power politics and state interests.

Realism highlights the pursuit of power and security as paramount in international relations.<sup>25</sup> The 123 Agreement, involving significant transfers of nuclear material and equipment, can be interpreted as a manifestation of the United States' pursuit of power and influence. The Indo-US nuclear deal, despite challenging the efficacy of the NPT, can be seen as a strategic move by the US to establish a stronger partnership with India to counterbalance other regional powers, thus enhancing its own security and influence.

The thesis explores the impact of the Indo-US nuclear deal on the balance between India and Pakistan. Realism suggests that states seek to maintain or shift the balance of power in their favor. The deal could potentially upset the regional balance by enhancing India's nuclear capabilities. This might prompt Pakistan to seek its own strategic advantage, possibly leading to an arms race. Realism sheds light on the competitive dynamics between these two states and the broader implications for regional stability.<sup>26</sup>

Realism asserts that states prioritize their own interests above international norms. The 123 Agreement's policy impact on Non NPT states exemplifies this principle. Realism suggests

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<sup>24</sup> Behr, Hartmut. *A history of international political theory: ontologies of the international*. Springer, 2009  
<https://link.springer.com/book/10.1057/9780230248380>

<sup>25</sup> Brenner, William J. "In search of monsters: Realism and progress in International Relations theory after September 11." *Security Studies* 15, no. 3 (2006): 496-528.

<sup>26</sup> Hurrell, Andrew. "Explaining the resurgence of regionalism in world politics." *Review of international Studies* 21, no. 4 (1995): 331-358.

that states engaging in such agreements seek to advance their strategic interests rather than adhering strictly to non-proliferation norms. This could lead to concerns among Non NPT states regarding the credibility and fairness of the global non-proliferation regime.

Realism<sup>27</sup> underscores the importance of power asymmetry in shaping international governance structures. The agreement raises questions about the criteria-based approach and the ability of powerful states to influence global norms. Realism's lens emphasizes how powerful states can exploit their influence to shape international norms to their advantage, potentially undermining the principle of equal sovereignty among states.

Realism predicts that states cooperate when it aligns with their self-interest. The thesis underscores the need for states to work together to strengthen nuclear governance regimes. Realism provides a rationale for states to cooperate in areas of mutual interest<sup>28</sup>, such as nuclear safety and security. However, it also acknowledges that such cooperation might be limited by competitive interests and mistrust.

In conclusion, applying Realism theory to the thesis provides a perspective that underscores the role of power, state interests, and the competitive nature of international politics in shaping the Indo-US nuclear deal's impact on the NPT and regional dynamics. It offers insights into how states pursue their security, engage in strategic partnerships, and negotiate agreements based on their own interests, often leading to complex consequences in the international system.<sup>29</sup>

## Research Methodology

For a researcher it is mandatory to be aware of the research technique and its importance in the area of international relations in order to carry out research. The social science research is not as same as the natural science research. The primary research method for this study is qualitative. This research study attempts to explore the Indo-US 123 agreement and its impact on the NPT treaty and its relevancy. The logical approach towards this study will be deductive approach where researcher tries to investigate the US-Indo 123 agreement and its impact on NPT, so for this researcher has started from the agreements, treaties and focus specifically on the impact of treaty. Under deductive research the thesis fills the gap which

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<sup>27</sup> Aron, Raymond. *Peace and war: a theory of international relations*. Routledge, 2017  
<https://www.jstor.org/stable/40203786>

<sup>28</sup> Stein, Arthur A. *Why nations cooperate: Circumstance and choice in international relations*. Cornell University Press, 1990.

<sup>29</sup> Lawson, Stephanie. *Theories of international relations: Contending approaches to world politics*. John Wiley & Sons, 2015.

has not been exclusively discussed before. Exploratory research approach of research methodology helps to explore all research questions that have not previously been studied in depth. It elaborates to find out the entire “WHY” questions in this research.

Secondary data has been gathered to answer the queries and to establish the arguments. Furthermore, books, research articles, reports from international and research think-tanks, reviews of documents, indirect observations, research journals, newspapers, Web sources, and other social media reports are used to gather relevant data. The data has incorporated after comprehensive analysis.

### **Significance of study**

This study helps to understand and explain the flaws and weakness of NPT. The thesis comprehends the impact of Indo-US 123 agreement on NPT and illustrates how US give a waiver to India through 123 agreements by passing a law in its own parliament then took approval from IAEA and NSG to conduct this deal with India. This study discusses relevancy of NPT in future, puts light on the Policy impact of 123 agreements for other for Non NPT states and offers a policy framework for inclusion of new aspirants in the NSG.

### **Delimitation**

US 123 agreements throughout the world under Atom for peace program and non-proliferation treaty has many other limitations and challenges itself. But this study only investigates the impact of US unilateral NSG waiver to India through 123 Agreement on non-proliferation treaty.

### **Organizational structure**

The research would be divided into four chapters.

### **Chapter One: Assessing US 123 Agreement and its relevance to the NPT**

Chapter explains the broad perspective of impact of Indo-US deal on the credibility of non-proliferation treaty. The US-initiated 123-Agreements in nuclear commerce present challenges with varying impacts, contradicting non-proliferation goals. Granting waivers to Non NPT countries raises concerns for nuclear and non-nuclear states, undermining nonproliferation efforts. Despite past success of the NPT, these agreements risk eroding global stability by compromising its principles and fostering distrust.

### **Chapter Two: Indo-US Nuclear Deal and NSG Waiver**

It covers the Indo-US deal and NSG waiver, that how this deal bolsters India's regional standing, ensuring US support as a watchdog if it withdraws from South Asia. The NSG waiver marked a pivotal moment, enabling India's economic growth and foreign policy alignment without NPT obligations or disarmament requirements.

### **Chapter Three: Impacts of Indo-US Deal on NPT Regime, IAEA and NSG**

It mainly discusses how this deal impact the NPT regime , IAEA and NSG. The chapter explain that how this deal compromise on non-proliferation and is driven by political and economic motives, evident in the India-specific deal influenced by arms market diversification. Despite terror and historical weapon use, defense mechanisms evolve, emphasizing global security. Trust deficits grow as major powers pursue nuclear parity amid rising arms race fears, highlighting the need for mutual understanding and balanced nuclear standards for sustained world peace.

### **Chapter Four: Policy Recommendations for New Aspirants**

This chapter explains the trust deficits grow as major powers pursue nuclear parity amid rising arms race fears, highlighting the need for mutual understanding and balanced nuclear standards for sustained world peace. The 2005 Indo-US nuclear agreement sparks debates on its impact, with opponents fearing proliferation risks and advocates highlighting strategic alliance and renewable energy benefits. Broader questions emerge on criteria for emerging nuclear aspirants and the need for strengthened global nuclear governance.

### **Findings, Recommendations And Conclusion**

## Chapter One

### Assessing US 123-Agreement and its Relevance to the NPT

#### 1.1 Introduction

In today's international arena nuclear energy has tremendous potential to cement the position of a country on a national and global arena. By keeping in view, the significance of nuclear energy most of the countries have embarked on an unending journey of nuclear commerce. Among them United States rules the list by signing numerous agreements with foreign countries and 123-Agreement is one of them. Basically 123 are the sections of Atomic Energy Act of 1954.<sup>30</sup> At present, The Atomic Energy Commission Act of 1954 is the legislative foundation in the United States for the development, regulation, and disposal of nuclear materials and infrastructure. Section 123 of the act establishes the legal basis for the president to enter into nuclear cooperation agreements with other nations in order to cooperate countries by exporting nuclear technology and resources for civilian usage. Section 123 regulates the transmission of nuclear-related materials originating in the United States, as well as the export of reactors, critical reactor components, and reactor fuel. Furthermore, such agreements, known commonly as "123-Agreements," and this development enable collaboration in other areas, such as technical exchanges, scientific research, and safeguarding debates. They lay the groundwork for extensive nuclear cooperation with other nations.

A partner must adhere to a series of strict nonproliferation conditions in order to engage in a 123-Agreement with the US. The State Department of the United States is in charge of negotiating 123 agreements, with assistance in technology and approval from the Department of Energy and the National Nuclear Security Administration (DOE/NNSA), as well as consulting with the USA Nuclear Regulatory Commission.<sup>31</sup>

In addition, between nuclear weapon states and non-nuclear weapon states, the NPT has established a barrier. The NPT established a barrier between the wealthy and the poor by granting de jure status to only those nuclear weapon states that acquired nuclear technology prior to 1968, opening the door for all other states to be accused of possessing nuclear weapons, and it required signatories to the NPT to only be recognized as non-nuclear weapon

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<sup>30</sup> Charles Campion, *20/20 Visions: Collaborative Planning and Placemaking* (London: Routledge, 2019).

<sup>31</sup> P. R. Chari, ed., *Indo-US Nuclear Deal: Seeking Synergy in Bilateralism* (London: Routledge, 2014).



states. Non-proliferation, the peaceful use of nuclear energy, and disarmament are the three pillars of the NPT.<sup>32</sup>

Under article 1 of NPT , the nuclear armed states which have got de jure status are bound to not transfer the nuclear weapons, explosives or any assistance in any way to those states who are aspiring to acquire nuclear technology. It insists the non-nuclear weapon states must pledge to accept the IAEA safeguards in order to verify that their nuclear use is only for peace purpose. <sup>33</sup>

In accordance with Article I of the NPT, nuclear-weapon states (those that have ratified the treaty and are designated as such) are prohibited from transferring nuclear weapons or other nuclear explosive devices to any recipient and from aiding or inciting non-nuclear-weapon states to acquire nuclear weapons. On the other hand, nuclear-weapon-free governments pledge not to acquire nuclear weapons or strive to produce them. Article I's main goal is to stop the spread of nuclear weapons. Article III of the NPT applies to the safeguards set forth by the International Atomic Energy Agency (IAEA). In order to guarantee that their nuclear activities are solely utilized for peaceful purposes, non-nuclear-weapon states that are parties to the NPT are required to reach a safeguards agreement with the IAEA. The IAEA conducts inspections and other verification procedures as part of these safeguards to make sure that nuclear resources and facilities aren't being used for military purposes.

The NPT Article IV gives the rights of peaceful nuclear technology trade to NPT signatory states. It gives the right to develop nuclear energy for peaceful purposes and to benefit from international cooperation in this area for all the signatories members and encourage the cooperation of nuclear trade between them for peaceful purposes.

Furthermore, The right of all signatories to the NPT to develop, research, manufacture, and use nuclear energy for peaceful purposes is acknowledged in Article IV of the treaty. It supports the sharing of scientific and technological knowledge among governments and recognizes the significance of international collaboration in advancing the peaceful use of nuclear energy. The freedom to take part in the advancement and exchange of nuclear technology, resources, and machinery for peaceful purposes is guaranteed by Article IV of

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<sup>32</sup> Lloyd Jensen, "Discussions and Reviews : The peaceful atom: a review," *Journal of Conflict Resolution* 9, no. 1 (1965), doi:10.1177/002200276500900112.

<sup>33</sup> Arms Control Association , "The USA Atomic Energy Act Section 123 At a Glance," Arms Control Association | The Authoritative Source on Arms Control Since 1971, last modified April 2019, <https://www.armscontrol.org/factsheets/AEASection123>.

the NPT. This covers collaboration in fields like nuclear energy production, nuclear medicine, agriculture, industry, and other non-nuclear-related peaceful uses of science and technology.

Under Article VI of the NPT, all Parties undertake to pursue good-faith negotiations on effective measures relating to cessation of the nuclear arms race, to nuclear disarmament, and to general and complete disarmament. The key objectives of the treaty are

### ***1.1.1 Cessation of the Nuclear Arms Race***

Stopping the nuclear arms race refers to actions taken to put an end to states competing to create and acquire nuclear weapons. The NPT acknowledges that the ongoing nuclear arms competition threatens global security and stability. The treaty's signatories agree to hold talks in order to come up with policies that would effectively put a stop to this race.<sup>34</sup>

### ***1.1.2 Nuclear Disarmament***

The NPT places a strong emphasis on the need for all parties to work towards nuclear disarmament. It recognizes that establishing long-term peace and security depends on disarming with nuclear weapons. The parties agree to negotiate in good faith in order to come up with concrete steps that will move nuclear weapons completely out of existence.

### ***1.1.3 Disarmament in its Broadest Sense***

The NPT acknowledges that the goal of general and comprehensive disarmament includes nuclear weapons. In order to establish a more safe and peaceful world, this refers to the comprehensive decrease and abolition of all weapons, including conventional weapons. The parties agree to continue talks on practical steps towards attaining general and total disarmament.

## **1.2 Background and Legal legitimacy of US 123-Agreement**

By 1930s, the atom had been split and its legality harnessed. The former smallest but indivisible particle could now be disintegrated and destabilize the whole world. But the very powers which had this unprecedented control over matter achieved now pretty well knew that if secrets of the darker side of the atom fell in the wrong hands, then it would only lead to an Armageddon for the homo-sapiens. Thus, during World War 2, realizing the grave threat that this technology posed to world; various initiatives were undertaken by international giants like the US itself to do the required stuff on preventing the proliferation of this technology.

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<sup>34</sup> R. Ramachandran, "Indo-US Nuclear Agreement and IAEA Safeguards," *Strategic Analysis* 29, no. 4 (2005), doi:10.1080/09700161.2005.12049830.

Manhattan project was the first such initiative embraced on a grand scale to put a full stop to an indiscriminate spread of the technology both vertical and horizontal. But by the time US had realized it, a host of other countries taking their cue from the naked destruction of Hiroshima and Nagasaki which had already sneaked into the world of atom to curtail and contain the monopoly of the USA on this technology.

Countries like USSR were already on it, followed by America's allies and favorites such as India that had got the ball rolling on the nuclear question in their favor with an American nod to their technology in the affirmative. Nuclear weapons penetrate our minds, influence our behavior, govern our society, and shape our fantasies.

For the first time in American history, it was President Eisenhower who originally conceived the idea and launched this mindful move under Section 123 of the Atomic Energy Act.<sup>35</sup> This Civil nuclear cooperation is commonly referred to as 123-Agreements. The purpose behind this arrangement was to set a platform for the United States will project its worldwide power by guarding and regulating against nuclear proliferation without adequate safeguards. The severity of the task was made even more of importance by comprehending and assessing that the Soviet Union would aim to enhance the exports of its nuclear led technology to garner influence across the seas at the American expense.

In response to the projected combined threat of nuclear proliferation and expanding Soviet influence, Eisenhower announced the Atoms for Peace Program in a speech to the United Nations in 1953. The agreement aimed to ensure the safe and secure growth of nuclear energy. Furthermore, the growth of Washington's power and assuring that the US could better oversee and command the advancement of nuclear-related technologies. The act's introduction and accompanying passage by Congress signified a reversal from regulations contained in the original Atomic Energy Act of 1946, which forbade and outlawed the exportation of any undesired technology at the time.

The Atom for Peace program contributed to the formation of the International Atomic Energy Agency (IAEA) in 1957. The United Nations held a session on the Charter of the IAEA, which approved the IAEA Statute, establishing the organization as an autonomous global organization charged with guaranteeing the advancement of peaceful atomic energy use while also supervising and controlling nuclear-led material and technological advancements. Soon

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<sup>35</sup> Jones, Brian Madison. *Abolishing the taboo: President Eisenhower and the permissible use of nuclear weapons for national security*. Kansas State University, 2008.

after the institution's formation, and in response to the ongoing rise of nuclear weapons countries such as the United Kingdom, China, and France by the beginning of the 1960s, the negotiation started for a treaty that would give the IAEA more teeth and a mandate for safeguards. It went into effect two years later, whereas it was open for signature in 1968. The NPT charged the IAEA with overseeing a broad and all-encompassing nuclear safeguards agenda aimed at aligning and preventing the spread and advancement of the nuclear arsenal and weaponry technology, promoting and cementing the prospects of cooperation in the peaceful and purposeful use of nuclear-generated energy, and furthering the positive prospects enshrined goal of achieving nuclear disarmament and refraining from such practices in the future.

Meanwhile, after introducing the program Atoms for Peace, it was US that started making effective use of the program to cement and then enhance influence across the globe. The US signed his first 123-Agreement to assist Turkey with nuclear research and facility in 1955.<sup>36</sup> Since then the United States ventured the journey and by 1967. The US had 34 accords in force, with sixty percent of them aimed only at research. India, Pakistan, South Africa, Venezuela, Israel, Iran, and Vietnam were among the first countries to participate in this field. Comprehensive deliberations and discussions took place, and a few of these initial accords have even drawn critique for their involvement in unwittingly accelerating and furthering nuclear weapons development throughout the world.

For example, after completing all tasks under the 123 Agreement with India, the US became India's primary and unrivaled provider of nuclear-led technology and materials between 1955 and 1974. Furthermore, US-trained Indian scientists and gave preferential treatment worth \$93 million in Atoms for Peace loans and grants. As a result, India was able to explode its first nuclear bomb in 1974, and by 1998, it had become a full-fledged nuclear-equipped state. After concluding a 123-Agreement with Pakistan, the US most likely gave the country with its first nuclear reactor in 1962. While Pakistan attempted to conceal and conceal its nuclear progress plans from Washington at that time, However, the nuclear powers have benefited in The US seemed ironically established ground by concluding a 123-Agreement to legitimize the authorization for the shipment of nuclear technology and materials to Iran. In this way, the United States helped Iran obtain its first nuclear research reactor in 1967.<sup>37</sup> Furthermore,

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<sup>36</sup> Varnum, Jessica C. "Closing the Nuclear Trapdoor in the US-Turkey Model Partnership." Brookings, June 17 (2013).

<sup>37</sup> Kerr, Paul K. "Iran's Nuclear Program: Status." Current Politics and Economics of the Middle East 9, no. 1 (2018): 151-250.

the US improved her technical training and channeled expertise to Iranian experts. This advancement enabled the Shah to establish the Iranian Atomic Energy Organization. Furthermore, Iran received funding for its future intentions to develop 20 nuclear reactors over the next 20 years, but the Iranian-Islamic Revolution of 1979 proved disastrous in this respect, effectively putting an end to nuclear cooperation.<sup>38</sup>

Despite this complex precedence, the most concerned agreements could still serve as a channel and mechanism for responsible nuclear energy enhancement. For Instance, the USA-India nuclear agreement of 2008 made India dis aggregating its civilian and military nuclear sectors and putting in a place the former under the umbrella of IAEA safeguards. Following year in 2009, the US put progression in this regard and signed an agreement which was unveiled as a gold standard 123-Agreement. This agreement was between United States and United Arab Emirates. It was assured and guaranteed that the later would never seek to violate the terms and conditions to enrich, enhance and reprocess nuclear led technology and material.

The NPT currently has 191 signatories, and with the power granted to it by the treaty, the IAEA is in charge of overseeing a comprehensive system of nuclear safeguards all around the world. The Atoms for Peace Program has contributed to the widespread acceptance of nonproliferation norms in the international community, as evidenced by the IAEA's 2,179 inspections it conducted in 183 countries and the maintenance of safeguards over 717 nuclear facilities in 2019 alone.

Additionally, there are now 23 active 123-Agreements. There are two of these (with Canada and the IAEA) that go back to when the Atoms for Peace programme first began, as well as agreements with the USA's foes and fellow nuclear-armed nations Russia and China. The most recent 123-Agreement for civil nuclear cooperation with Mexico was signed in 2018 by the Trump administration, but it has not yet taken effect.

### **1.3 Normative and Legal parameters of US 123-Agreements**

The 123 Agreement is a legislative-executive agreement that establishes the broad legal foundation for US to collaborate with other nations on civil nuclear materials, including the export of nuclear reactors, crucial reactor parts, and reactor fuel. A set of assurances and preferred security measures to be implemented by the collaborating nation, a "Nuclear

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<sup>38</sup> Jonathan L. Black-Branch and Dieter Fleck, *Nuclear Non-Proliferation in International Law: Volume II - Verification and Compliance* (Basingstoke: Springer, 2015).

Proliferation Assessment Statement" filed in Congress, and a formal declaration by the president that the recommended agreement's effectiveness "will foster and do not pose an unreasonable threat to, our shared defence and security" are just a few of the legal requirements specified by the Atomic Energy Act, which will be discussed in greater detail below.

This agreement operates as a pre-existing congressional-executive accord, which means that it will take effect without any required action from Congress, if the president has concluded a 123-Agreement and obtained all necessary guarantees from the collaborating country. The Act specifically states that the agreement must be in effect for 90 days in a row without interruption before taking effect, barring a joint resolution to the contrary. The 123 Agreement is more effectively understood as an ex-post congressional-executive agreement, meaning that in order for it to take effect, Congress must first accept it. This is the situation if the president has waived any of the Atomic Energy Act's expressly stated provisions in favor of a certain country.

On the international level, where Article II treaties and congressional-executive agreements are regarded equally, this legal divide is, of course, less prominent. It's vital to remember, however, that signing a 123-Agreement simply authorizes exports of nuclear technology; it does not require the United States to do so.

The specific nuclear safety standards of the Act are then covered. Nine nonproliferation standards must be met, according to Section 123 of the statute,<sup>39</sup> before an agreement may be signed. In particular, if the country in question is a state without nuclear weapons, the cooperating party must agree to IAEA safeguards being applied to any transferred nuclear material and equipment. The host state is required to guarantee the physical security of all nuclear material, to make the commitments that it won't conduct nuclear explosive testing or use the material for other military purposes, that it won't enrich or reprocess any nuclear material obtained from the US, and that it won't transfer the material to unapproved parties or outside their jurisdictional control without permission. Furthermore, the US has the power to request the return of any nuclear technology from a state without nuclear weapons in the event of unauthorized military nuclear work or the revocation of IAEA safeguards. According to the guarantee of the host country, no plutonium, uranium-233, or uranium-235 enriched to more than 20 percent may be retained at any facility without prior consent from

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<sup>39</sup> HRG, S. "SECTION 123: CIVILIAN NUCLEAR COOPERATION AGREEMENTS." (2014).

the United States. The host country must also guarantee that all nuclear facilities and products it creates in accordance with the agreement will adhere to the aforementioned requirements.

As previously indicated, the president has the authority to waive any of these conditions. According to the law, a president may decide to waive any obligation if doing so would "seriously prejudicial to the achievement of the USA nonproliferation objectives or otherwise jeopardize the common defence and security." The Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act of 2006 specifically permitted President George W. Bush to waive some of Section 123's requirements without requesting ex post congressional approval, as is normally required. While no president has ever taken use of this option in any of the agreements that are now in force, President George W. Bush had the opportunity to circumvent the requirement to present an exempted agreement to Congress in 2006 despite the fact that no president has ever done so.<sup>40</sup> The extremely protracted negotiating process for these treaties is also ensured by Section 123, which also makes guarantee that Congress is informed. The statute requires the president to keep the House Foreign Affairs Committee and the Senate Foreign Relations Committee "fully and currently aware of any action or proceedings relating to a new or revised" civil nuclear cooperation agreement.

#### 1.4 NPT: Purpose and Spirit

The NPT is a landmark in global agreements whose aims is to promote partnership in the peaceful uses of nuclear energy, to prevent the spread of nuclear weapons and weapons technology, and to promote the cause of total and nuclear disarmament. The accord is the single legally binding step towards the international objective of nuclear-weapons nations disarmament. The Treaty was made available for signature in 1968, and it went into effect in 1970.

Three fundamental pillars support the NPT

- **Non-Proliferation**

The NPT encourages other nations to give up nuclear weapons and pursue peaceful nuclear energy programs in order to stop the spread of nuclear weapons. It does this by restricting the ability to acquire nuclear weapons to the five states that have been officially recognized as possessing them—the United States, Russia, the United Kingdom, France, and China.

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<sup>40</sup> Conlan, Tim, and John Dinan. "Federalism, the Bush administration, and the transformation of American conservatism." *Publius: The Journal of Federalism* 37, no. 3 (2007): 279-303.

- **Disarmament**

The treaty calls on nuclear-weapon nations to work towards the reduction and eventual elimination of their nuclear arsenals and acknowledges the objective of attaining nuclear disarmament. However, the pact makes no mention of the precise procedures or timetable for disarmament.

- **Nuclear Energy for Peaceful Purposes**

The NPT acknowledges that all parties have the right to produce nuclear energy for peaceful purposes. Parties to the treaty that do not possess nuclear weapons are obligated to accept safeguards put in place by the IAEA to guarantee that their nuclear programmes are only used for peaceful purposes.

On May 11, 1995, the pact was extended indefinitely. The five nuclear-armed states are counted among the states that have ratified the Treaty.<sup>41</sup> The NPT has been signed by more countries than any previous arms control and disarmament treaties, demonstrating its significance. The pact is regarded as the foundation of the worldwide nuclear non-proliferation system and an important step towards nuclear disarmament. It was established to halt the spread of nuclear weapons, advance the cause of total and nuclear disarmament, and foster cooperation in the peaceful use of nuclear energy.

The treaty also established a safeguards system under the control of the IAEA in order to further the goal of non-proliferation and as a confidence-building measure between States parties. Through IAEA inspections, safeguards are utilised to confirm treaty compliance. While safeguards prevent the diversion of fissile material for use in weapons, the treaty fosters collaboration in the field of peaceful nuclear technology and equal access to this technology for all states parties.

Moreover, Leaders from the US and the USSR thought that new, more extensive arms control agreements would be forthcoming after their countries signed the Limited Test Ban Treaty in 1963. Both nations had an interest in negotiating agreements that would aid in slowing the pace of the arms race and limiting competition in the development of strategic weapons due to the high expenses associated with the development and deployment of new and more technologically superior nuclear weapons. The two sides came to an agreement on the Outer

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<sup>41</sup> Carranza, Mario E. "Can the NPT survive? The theory and practice of US nuclear non-proliferation policy after September 11." *Contemporary Security Policy* 27, no. 3 (2006): 489-525.



orbit Treaty, which forbade the placement of nuclear weapons systems as satellites in orbit, four years after the original agreement. More crucially, the Soviet Union and the United States were able to finalise a non-proliferation treaty through negotiation.

Nuclear weapon technology had the potential to be contained and spread by the beginning of the 1960s. Academic publications had allowed the study of bursting and fusing atoms to reach the general public, and private firms were now interested in nuclear technology as well as governments. The production of plutonium, the primary component of nuclear bombs, was becoming more accessible and affordable. Due to these modifications, there were five nuclear powers in the globe by 1964. Along with the US, the USSR, and the UK, which all developed nuclear weapons during or soon after World War II, France detonated its first nuclear weapon in 1960, and the People's Republic of China followed suit in 1964.<sup>42</sup> There were numerous additional nations that had not yet conducted a weapons test but whose technological development was such that if they chose to do so, they most likely could in the near future.

For international legislators, the proliferation of nuclear weapons technology has various implications. The policy of deterrence could be reasonably maintained even though the only nations capable of launching a nuclear attack were the United States, its close ally Britain, and the Soviet Union. Any attack during the Cold War would have likely resulted in mutually assured devastation because both sides had large arsenals of weapons and the ability to retaliate after being attacked. As a result, there was still a significant incentive for any state to avoid launching a nuclear conflict. However, this balance of power between the two Cold War superpowers ran the risk of being upset, and the deterrent system would be in jeopardy if more countries, especially emerging ones that were on the margins, developed nuclear weapons. Moreover, the likelihood of a nuclear conflict with genuinely global implications increased if nations with contentious border disputes were capable of using nuclear weapons to launch an assault. The nuclear states were likewise hesitant to share nuclear technology with developing countries, especially when that technology might be applied peacefully. The NPT that would aid in halting the spread of nuclear weapons has garnered interest on a global scale as a result of all these worries.

Although, there was no doubt about the advantages of such a pact, there was some debate during its formation. In a 1961 meeting of the United Nations General Assembly, Ireland was the first country to call for a prohibition on the transfer of nuclear technology. Despite the

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<sup>42</sup> Mueller, John. "The essential irrelevance of nuclear weapons: Stability in the postwar world." *International Security* 13, no. 2 (1988): 55-79.

members' approval of the resolution, the Geneva Disarmament Conference negotiations didn't really get going until 1965. At the time, US negotiators struggled to strike a delicate balance between the desire to strengthen its NATO allies by granting several Western European countries some degree of control over nuclear weapons and the desire to prevent further transfer of the technology it shared with the Soviet Union. The nuclear weapons strategy The United States eventually gave up on NATO's threat to end the negotiations in favour of forging a workable agreement. It was effectively demanded that countries that had not yet created nuclear weaponry give up all future plans to do so. Even if the nuclear nations pledged to never transfer the technology, there would probably still be too many nuclear powers in the world if the non-nuclear states did not agree to this. After two years of negotiations, the nuclear countries were able to reach an agreement with enough non-nuclear powers

The final pact had several clauses that were all intended to stop the spread of nuclear weaponry technology. First, the signatories to the nuclear treaty pledged to refrain from giving away either nuclear weapons or nuclear technology to any other state. Second, the non-nuclear states consented to refrain from developing, acquiring, or receiving nuclear weapons. The International Atomic Energy Agency (IAEA)'s safeguards against proliferation were accepted by all signatories.<sup>43</sup> The parties to the pact also committed to continue talks to help put an end to the nuclear arms race and restrain the spread of the technology, as well as to cooperate in the development of peaceful nuclear technology. The agreement stipulated that the treaty would be reviewed every five years and had a 25-year time-span.

The NPT was, and still is, hailed as a crucial step in the ongoing campaigns to curtail or stop the spread of nuclear weapons. Nevertheless, it had a significant flaw in that several non-nuclear governments and two nuclear powers, the People's Republic of China and France, refused to join the accord. <sup>44</sup>Argentina, Brazil, India, Israel, Pakistan, Saudi Arabia, and South Africa were particularly significant among the non-nuclear governments who refused to sign on, so restricting their own future nuclear programmes as these nations were on the verge of developing the technology. In fact, India detonated its first nuclear weapon in 1974, thereby joining the "nuclear club." In 1983, Pakistan conducted its first nuclear weapon test. The 1995 NPT Review and Extension Conference confirmed the terms of the Treaty,

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<sup>43</sup> Rosenthal, Michael, and Warren M. Stern. *Deterring Nuclear Proliferation: The Importance of IAEA Safeguards*. No. BNL-211553-2019-BOOK. Brookhaven National Lab.(BNL), Upton, NY (United States), 2019.

<sup>44</sup> Kim, Samuel S. "The People's Republic of China and the charter-based international legal order." *American Journal of International Law* 72, no. 2 (1978): 317-349.

particularly article VIII, paragraph 3, which calls for a review of the Treaty's operation every five years. The 2015 Review Conference of the parties to the treaty on the non-proliferation of nuclear weapons ended without the adoption of a substantive consensus outcome, following the successful 2010 Review Conference at which States parties agreed to a final document containing conclusions and recommendations for follow-up actions, including the implementation of the 1995 Resolution on the Middle East. The 2015 results represent a setback for the reinforced review procedure established to promote accountability with regard to operations under the Treaty's three pillars as part of the package supporting the Treaty's indefinite extension in 1995. The 2020 Review Conference preparation process is currently under progress.<sup>45</sup>

### 1.5 Relevance between US123-Agreements and NPT

The NPT aspires to promote peaceful nuclear energy uses, stop the spread of nuclear weapons and weapons technology, and advance the disarmament objective. The IAEA is in charge of the safeguards system that the treaty established, and it also assumes a key role in the fields of technology transfer for peaceful purposes. The NPT and IAEA have started a campaign to strengthen 123 US agreements, though. As a result, the US 123 agreement is directly impacted by changes to the NPT and IAEA programme, and vice versa.

At the peak of Cold War, both the USA and the USSR feared an apocalypse that world was heading. On the one hand, USA had cherished the idea of a lethal weapon which could send goosebumps up the spine of belligerent countries. In fact, it was the use of these nuclear weapons in August, 1945 that ended World War 2 and put an end to the restive march of imperial Japan in the said war. But what was to transpire afterwards was more appealing and frantic for the world. When USSR acquired nuclear capability, it became etched in stone that the nuclear monopoly would change hands in a highly polarized world and soon it did when the list of countries going ballistic went on increasing members and adding more to its count. The fears of an atomic spill over surged across the globe. Even within the USA, the sense of dissatisfaction climbed up. Eisenhower, in his speech of atoms for peace, leaked out some of this extant desperation saying like this narration: First, other countries—possibly all others—will eventually share the knowledge that several nations currently hold. Second, even having a massive advantage in weaponry and the ability to launch deadly counterattacks is insufficient to protect against the terrible collateral damage and human toll that would result

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<sup>45</sup> Welsh, Susan B. "Delegate perspectives on the 1995 NPT review and extension conference." (1995): 1-24.

from surprise aggression. The free world has naturally started a significant program of warning and defence systems after becoming at least faintly aware of these truths. The program will be enlarged and speed up. But let no one believe that spending enormous money on weapons and defence systems can ensure complete safety for the cities and people of any country. There is no such simple solution possible due to the terrible myth behind the atomic weapon. An attacker with the necessary number of atomic bombs for a surprise strike could possibly position enough of his bombs on the targeted mortar to inflict horrifying damage even against the strongest defence. Thus, around 1960s, when the world looked fraught with nuclear threats morphing into one form or the other, steps were undertaken to defuse this pushy situation that could have and surely would have led to a quandary. The escalation was more than real, especially after the Cuban missile crisis, when all it would take was just a perfunctory indifference to the global peace to reduce world to the mound of dead. <sup>46</sup>

NPT was thus heralded as a millennial achievement considering the threats that lurked large at that time. Despite a commendable job that NPT has done on the front of stopping nuclear weapons; yet underneath this canvass of potentiation lies many an issue that could have been tackled easily. One of the biggest lacking in NPT is the paucity of enforcement mechanism. It is open to enfranchisement, but can't heap enough pressure on countries to deter them from getting the nuclear weapon. Instead of putting aside its blank spaces that needed a mutual effort to be filled out; USA and NSG did the opposite through a grand compromise on the very spirit of NPT by 123 agreements. <sup>47</sup>

NPTs are treaties that can be interpreted and can be complicated. According to some detractors, the following 123 Agreements sections could be interpreted as being in conflict with the NPT's guiding principles: <sup>48</sup>

- **Non-Proliferation**

The NPT asks for the disarmament of nuclear-armed states and strives to stop the spread of nuclear weapons. Some 123 Agreements, critics claim, could enhance the danger of proliferation or weaken non-proliferation efforts, especially those that permit the transfer of sensitive nuclear technology and materials.

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<sup>46</sup> Cambridge University Press , "United States and South Korea Sign Major Free Trade Agreement; Prospects Uncertain," *American Journal of International Law* 101, no. 4 (2007): xx, doi:10.1017/s0002930000757149.

<sup>47</sup> Bruce D. Larkin, *Designing Denuclearization: An Interpretive Encyclopedia* (New York: Routledge, 2008).

<sup>48</sup> Dinshaw Mistry, *The US–India Nuclear Agreement* (Cambridge: Cambridge University Press, 2014).

- **Equal Access to Peaceful Nuclear Technology principles**

The NPT acknowledges that all parties have a right to access nuclear technology for peaceful purposes. Critics assert that special clauses in some 123 Agreements may favour particular nations, restricting the equal access to nuclear technology and collaboration for all NPT states.

- **Control and Safeguards**

According to the NPT, non-nuclear weapon nations must consent to IAEA safeguards that confirm their nuclear activities are solely for peaceful purposes. Some 123 Agreements, according to critics, may not sufficiently address non-proliferation issues or guarantee strong safeguards for transferred nuclear materials and technology.

It is significant to note that opinions on the compatibility of the NPT and the 123 Agreements can differ among experts and stakeholders, as can the interpretation and application of both. The United States has insisted that its 123 Agreements are compliant with both its international commitments and non-proliferation goals. However, detractors keep pointing out apparent inconsistencies or flaws in certain agreements. In order to determine any potential inconsistencies or compatibility problems, it is required to examine each specific 123 Agreement and its provisions in the context of the NPT and more general non-proliferation goals.

## Conclusion

In a nutshell, US-initiated 123-Agreements in the development of nuclear and atomic commerce generated multi-pronged challenges range from constructive to destructive outcomes. US approach to grant an exemption even to the countries which are not signatory to the NPT via providing waiver to the states in the pretext of 123-Agreement can cause a concerning situation for nuclear and non-nuclear states. This approach is quite in contradiction with the principal measures of non-proliferation treaty. There are strong arguments in favour of or to strengthen changes of some kind due to the flaws in the current 123-Agreements strategy. The issue therefore becomes how to maximize nonproliferation advantages while avoiding or minimizing nonproliferation problems. To offer certain reforms more multilateral legitimacy and normative potential, one option would be for US politicians to negotiate them rather than unilaterally impose them. There is no doubt that even legislators disagree on the size, breadth, and expected future of these accords. The two countries with the most significant nuclear export industries are Russia and China, which both have less

restrictive legislative requirements and frequently appear to be developing nuclear capabilities for international partners. Despite the fact that above 70 years have gone since the inception of Atoms for Peace, the geopolitical motivation for civil nuclear cooperation—that foreign adversaries would exploit nuclear energy to gain ground globally at the expense of Washington—remains the same. The concern that sincere civil nuclear cooperation would put the global nuclear nonproliferation framework at danger has also increased. The Henry J. Hyde United States-India Peaceful Atomic Energy Cooperation Act, approved by Congress in 2006, altered the Atomic Energy Act to allow nuclear cooperation with India, a nation which is not a signatory to NPT and doesn't uphold full-scope safeguards. The Hyde amendment has come under fire for weakening US efforts around the world to combat proliferation.<sup>49</sup>

Most of the States like Pakistan and China are against this agreement because this is biased and stand against nuclear regime. Nuclear and non-nuclear states are against such waivers as they believe that it will legitimize the nuclear program of India.<sup>50</sup>

Philosophically speaking, future of any arrangement depends on its past and blooms in present. In the current scenario, the global peace is at crossroads of wrong decision making. The wars are ubiquitous and the competition is very intense. But it is not wise to shun the past that is collective and set sail for a future that is still untapped and yet to be discovered. For seven decades now, NPT has somehow kept tabs on nuclear technology and held it back from heading towards the wrong hands. But with the flurry of these 123-Agreements may prove dangerous beyond deliberation. It might gnaw at the solidity and fairness of the NPT regime rendering the whole process distrusted and thrown into disrepute. The application of the protocols of NPT shouldn't stir up divide among countries already divided by their paranoia towards self-defense and global fairness.

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<sup>49</sup> Rebecca D. Gibbons, *The Hegemon's Tool Kit: US Leadership and the Politics of the Nuclear Nonproliferation Regime* (Ithaca: Cornell University Press, 2022).

<sup>50</sup> George Perkovich, "Global implications of the USA-India deal," *Daedalus* 139, no. 1 (2010), doi:10.1162/daed.2010.139.1.20.

## Chapter Two

### Indo-US Nuclear Deal and NSG Waiver

#### 2.1 Introduction

For the first time in history, US found itself lobbying for a country by tweaking its laws and throwing down its principles and a lofty talk on denuclearization. The 123 agreement or better known as Indo-US nuclear deal came into effect when its framework came out in 2005. After extensive engagement between the two countries, the deal was given a go ahead by IAEA in 2008. Later on, under the aegis of US; the nuclear cartel, also known as NSG was approached to give to India a special waiver on its nuclear declarations, contrary to logic that had remained in place on any country wishing to go nuclear either for civilian purpose or for military purpose since NPT. But with this deal, the sane logic became squalid logic. Despite yawning contradictions such as India being a non-signatory to NPT, it was permitted to exclusively place the plants it designated for civilian enrichment at will under the IAEA watch, and move on to purchase the required stuff from the NSG without complex and multi-phased scrutiny.<sup>51</sup> The agreement between Washington, D.C., and New Delhi on civil nuclear cooperation will benefit both nations equally. The agreement was reached between the two parties, and it called for the construction of six American nuclear power facilities in India in the future as well as increased bilateral security between the two nations. In addition, the agreement helped India run its own power plants by giving it access to vital technology in key sectors, such as alternative energy. India was likewise freed from its nuclear military and civilian activities thanks to the Civilian Nuclear Energy Pact. In this chapter, all the prospects and problems related to this deal will be discussed.<sup>52</sup>

#### 2.2 Aim of the Deal

Although disregarding the effects on regional stability and nations, particularly Pakistan, the goal of the India-US alliance was to increase India's strategic importance in South Asia. The US and India's civil nuclear accord is a comprehensive framework agreement made up of several agreements. The 2005 agreement is seen as being particularly helpful for nuclear trade and commerce.<sup>53</sup> As a result, several agreements have been inked between the two

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<sup>51</sup> George Perkovich, "Global implications of the USA-India deal," *Daedalus* 139, no. 1 (2010), doi:10.1162/daed.2010.139.1.20.

<sup>52</sup> Rashmi Bhure, "Post India – US nuclear deal: Need for restructuring the nonproliferation regime," *Nuclear Disarmament: Regional Perspectives on Progress*, 2013

<sup>53</sup> Subrata Ghoshroy, "The Indo-US Nuclear Deal: Triumph of Strategic and Business Interests over Non-Proliferation," *South Asia at a Crossroads*, 2010

countries since the nuclear pact became operative. Eventually, the US made a number of adjustments to its domestic laws to enable nuclear commerce or trade. The most significant of these was India's grant of an NSG (Nuclear Suppliers Group) waiver. Thereby giving the latter benefits of an NPT states and access to global market.

### 2.3 Features and Reasons behind Signing the Agreement

There are several reasons behind signing the agreement, includes

- India Domestic Energy Need for Socio-Economic Growth
- Indian Economy and Global Market
- 2.3.3 India's Aspiration to Evaluate its Stations and Gain Global Mainstreaming
- India a Net Section Provider

#### 2.3.1 India's Domestic Energy Need for Socio-Economic Growth

Several of the provisions of this agreement were provided by India under Section 123. The major motive for this deal might be to meet their energy demand. It is important for India to sustain its present economic growth rate of 8 to 10% per year if it is to realize the aim of eliminating poverty in India. One of the biggest constraints to India's progress in several sectors is a lack of energy supplies. This Agreement placed India in a distinct position as a state with sophisticated nuclear technology transferred from the United States. The Agreement calls for the establishment of a strategic nuclear fuel preservation plan to protect India's reactors from any disruption in supply.<sup>54</sup>

All of these materials and equipment have transferred under this agreement via the IAEA safeguard. Since this agreement, India's nuclear arsenal has grown significantly, posing a threat to Pakistan, China, and the whole region. India, on the other hand, is attempting to become militarily stronger than Pakistan. According to the US, the goal is just to elevate India's standing in the area and pave the way for actions to be taken to resolve conflicts between Pakistan and India, but as a result of this collaboration, antagonism between them has grown. The envy factor ensures India and Pakistan's military capabilities and strategic self-sufficiency. Both countries are attempting to expand their arsenals.<sup>55</sup>

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<sup>54</sup> "The Process of Negotiation of the Nuclear Deal/123 Agreement (India): Reshmi Kazi," *Indo-US Nuclear Deal*, 2013

<sup>55</sup> Reuters Staff, "TIMELINE: Twists and turns in the India-USA nuclear deal," *Reuters*, October 2, 2008



### **2.3.2 India's Aspiration to Evaluate its Stations and Gain Global Mainstreaming**

Both governments disapproved of UN resolution 1172, which put pressure on them to ratify the NPT and CTBT (Council, 1998).<sup>56</sup> Other nuclear states do not recognize India's position as a nuclear power, but following that agreement, India was seen as a strong nation. India benefits from this position since it receives nuclear technology from the USA and NSG. Some academics contend that the use of nuclear weapons makes war between various governments and areas more peaceful. These nuclear states were evidence of the stability of the area. Surprisingly, India had not acquired a single US nuclear power plant since 2008.<sup>57</sup> The USA defense business anticipated that once the agreement was signed, military sales would increase, but India hasn't made any notable sales. The deal's primary goal for India is to remove the distance between the two countries caused by a massive Asian state in terms of people.

### **2.3.3 Indian Economy and Global Market**

Though India got the needed support coming its way from major Western powers after some initial objections by Ireland, and Newzeland, yet China stood up to the deal calling it a compromise on international efforts to stop the spread of nuclear technology. The most baffling part in all of this episode was US conceding to India the ground on its commitment to Nonproliferation.<sup>58</sup> The changes inserted into US Atomic energy Act through Hyde Act (Dec,2006) demonstrated America's more than willingness to extend to India favors on this agreement that no other country could even think of in the wildest stretches of dreams. The final draft of the deal also showed this tactfulness of language in which India was exempted from any explicit commitment to no nuclear tests in future. It simply meant that India could carry on with its military grade enrichment and at the same time had the access to world market on the most sensitive material. It was somehow the real version of a fearful version of the global cops like US going rogue for their myopic ends.

Pakistan voiced opposition to the American-Indian agreement right once, claiming that it was entitled to the same terms. The agreement "represents an unwinding of the NSG's current restrictions and the transfer of peaceful nuclear energy from NSG member states to Non NPT States," according to a statement from the Ministry of Foreign Affairs in March 2006. Given

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<sup>56</sup> Rahul A. Maslekar, "India's Military Diplomacy," *Defence Diplomacy and National Security Strategy: Views from the Global South*, 2020

<sup>57</sup> "IAEA Clears Indo-US Nuclear Deal," *The National*, last modified August 2, 2008

<sup>58</sup> Tom Coppen, "The Law of Arms Control and the International Non-proliferation Regime," *Brill* 29 (January 2017), doi:10.1163/9789004333352.

that it lacks fossil fuels and has a sizable, fully secured nuclear power generating program, Pakistan has the same claim and expectation for international collaboration under safeguards for nuclear power generation. But, the Bush administration was resolute about avoiding pursuing a similar arrangement with Pakistan after the 2004 disclosures regarding the Abdul Qadeer Khan black market nuclear network.<sup>59</sup>

## 2.4 Response From International Community

### *2.4.1 Positive*

The United States and India saw this deal as a major strategic partnership. It marked a shift in U.S. policy toward India and aimed to strengthen economic and political ties.

### *2.4.2 Mixed Response*

The international community had a varied response. Some countries, such as Australia and Canada, initially expressed concerns over India not being a signatory to the Nuclear Non-Proliferation Treaty (NPT). However, they eventually modified their nuclear export policies to support the deal. Russia had mixed reactions to the Indo-US nuclear deal. On one hand, it viewed the deal as an opportunity for nuclear cooperation with India, which has historically been a significant buyer of Russian defense and nuclear technology. However, Russia was also cautious about the potential implications of the deal for regional stability. Like China, it was concerned that this agreement might lead to a nuclear arms race in South Asia. China expressed concerns about the Indo-US nuclear deal, primarily because it signaled a shift in the international non-proliferation regime. China is sensitive to any developments that might upset the strategic balance in South Asia, where India is a nuclear-armed state. China was also concerned that this deal might encourage Pakistan to seek similar agreements with other countries, potentially destabilizing the region further.

### *2.4.3 Criticism*

Non-proliferation advocates, including some NGOs and countries, were critical of the deal. They argued that it set a precedent for nuclear-armed states outside the NPT to access civilian nuclear technology, potentially undermining global non-proliferation efforts.

Overall, the Indo-US nuclear deal had a significant impact on India's foreign relations, its nuclear program, and the global non-proliferation landscape, with a wide range of responses

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<sup>59</sup> Sharon Squassoni, "The USA-Indian Deal and Its Impact," Arms Control Association | The Authoritative Source on Arms Control Since 1971, last modified 2012

from the international community. It's important to note that these responses were nuanced and depended on various factors, including each country's geopolitical interests, strategic concerns, and its individual relationship with India and the United States. Over the years, India has continued to develop its civilian nuclear program while maintaining its nuclear weapons, and its relationships with both China and Russia have evolved in response to these developments.

## 2.5 Benefits for the USA

### ***2.5.1 US Foreign Policy Alignment***

War on terror (2001) seems to have re-scripted the need for US to get India onboard in its political chess. Even up till (1998), there was no spared thought on India getting such a deal and US opening up so much as to take hands off the US commitment to NPT. But Bush administration saw into this step something akin to laying a blockade against China, which is why all forethought and historical lessons were thrown to the wind that led to India getting away and ending up getting something unparalleled in the history. Bush administration was hell bent on bypassing everything to get India to align with US foreign policy objectives in South Asian Region.<sup>60</sup>

### ***2.5.2 Disparity in NSG Clearances and its Implications for Global Nuclear Deals***

Later on, making the deal contingent upon clearance from NSG was merely a political stunt. Since NSG would never say no a mighty US government; India was sure to get this deal anyways, once US had decided so. But at the same time, and contrary to what NSG did for India, when China vows to ensure continuous fuel supply to Pakistan for Chasma 1 and Chasma 2, there is a furor over it for being very dangerous step in the South Asian Region. But things were sure to push to an extreme around the globe, the day India got these showers of these 123 agreements.

### ***2.5.3 Implications of NSG Waiver for Global Nuclear Safeguards and Nonproliferation***

What this waiver to India from NSG did was to weaken the future of a uniform safeguards as well as import and export regime for the world. This could be one of the reasons for North Korean withdrawal from its 1994 commitment on the provision of safe fuel for its civilian purpose. Though North Korean detour preceded the 123 agreements yet introspectively,

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<sup>60</sup> Syed S. Bukhari, *Pakistan's Security and the India-US Strategic Partnership: Nuclear Politics and Security Competition* (London: Routledge, 2020).

North Korean distrust shows that it was very much certain about its security getting compromised at the hands of a western nonproliferation regime.<sup>61</sup>

#### ***2.5.4 The Deterioration of Trust between Iran and Western Powers over Nuclear Energy***

Iran is another scintillating example, which since 1979 has been viewed as a bad guy in Western capitals. Though Iran was originally a signatory to NPT, but once it proceeded to employ its resources for catering to its energy needs, it was demonized as covertly making nuclear weapons. As a result, the trust between Iran and Western powers has stooped to new lows and will likely propel along that trajectory of mistrust. And despite repeated efforts, the trust hasn't revived back into life.

Recently, the Trump's walkout from an understanding with Iran on its nuclear energy is an example of how political considerations have taken over the champions of nonproliferation regime and how efforts at mending the old fences have paved way for a new frenzy to break them on political and interest basis. Even by the defacto NPT, and FMCT scope, India through this treaty was expected to comply with safety standards, but India hasn't agreed to any halt on its fissile material production and nor it will. This is highly dangerous and precarious for world peace, specifically, on the nonproliferation side.<sup>62</sup>

#### ***2.5.5 Selective NSG Safeguards Regime on Global Nonproliferation Security***

Altering NSG safeguards regime selectively and country specifically could compromise the security of the whole nonproliferation process. Countries with nukes were supposed to agree to comprehensive checks rather than facility-specific inspections under the watch of the IAEA to gain access to the nuclear stuff. But the change of times and global political dynamics altered everything from threat perception to threat destruction.

#### ***2.5.6 USA Strategic Cooperation with India***

The US reap long-term advantages from its strategic cooperation with India in terms of their nuclear energy programme in a variety of important spheres. Yet, the US foreign policy on nuclear non-proliferation has been characterized by implementing the Indo-US Civilian Nuclear Agreement. Although the goal of this agreement is to increase bilateral commerce,

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<sup>61</sup> Daryl G. Kimball, "Pakistan Presses Case for USA Nuclear Deal," Arms Control Association | The Authoritative Source on Arms Control Since 1971, accessed December 12, 2022, <https://www.armscontrol.org/act/2010-03/pakistan-presses-case-us-nuclear-deal>.

<sup>62</sup> OECD|Nuclear Energy Agency, "Section 123 of USA Atomic Energy Act," OECD ILibrary, last modified July 8, 2008, [https://www.oecd-ilibrary.org/nuclear-energy/section-123-of-u-s-atomic-energy-act\\_nuclear\\_law-2008-5k9gw7rz1cs7](https://www.oecd-ilibrary.org/nuclear-energy/section-123-of-u-s-atomic-energy-act_nuclear_law-2008-5k9gw7rz1cs7).

the US armaments industry would force trade to lean more in the US's favour. Moreover, building up Civilian Nuclear Energy infrastructure and providing nuclear reactors to India assist American businesses greatly and be beneficial to the US economy.

The joint agreement is very important to the US since it offers huge benefits that range from economic development to strategic collaboration. The agreement between the two countries has the potential to increase the economic wealth of the United States of America, which will produce 40 billion dollars in global commerce in the coming years as India plans to construct about 24 nuclear reactors over the course of the next fifteen years. Under the terms of the agreement, India will buy nuclear reactors from the US, creating new markets and job possibilities for Americans. Also, a collaboration with India will assist the US in balancing China's rise to prominence, which is unquestionably a grave concern for the US. The United States is losing worldwide markets; this agreement will help its nuclear businesses compete in global markets.<sup>63</sup>

#### ***2.5.7 US Secretary of State's Endorsement of the Indo-US Civil Nuclear Deal and its Strategic Significance***

In support of the civil nuclear deal and the Indo-USA strategic partnership, USA Secretary of State Condoleezza Rice emphasized that India has a thirty-year track record of responsible behavior on proliferation issues and that the agreement would make the world, as well as the futures of India and the United States, safe. In addition to calling the pact unique, Rice stressed that India's distinction as a democracy with an open and responsible government urged the United States to go with this arrangement.<sup>64</sup>

Other countries, like Iran and North Korea, which had been trying to advance their program in accordance with this agreement, do not fit into this category because Iran supports terrorism and North Korea is the least transparent country, a threat to its neighbors, and disseminates weapons. She also thought that by providing for India's energy requirements, it would minimize that nation's dependency on fossil fuels and the negative environmental repercussions of its brisk economic development. On the other hand, she thought that lowering the nation's dependency on fossil fuels would help the American economy and

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<sup>63</sup> Rashmi Bhure, "Post India – US nuclear deal: Need for restructuring the nonproliferation regime," *Nuclear Disarmament: Regional Perspectives on Progress*, 2013

<sup>64</sup> Condoleezza Rice, "Our Opportunity With India," *Washington Post*, March 13, 2006, A15.

boost employment and job prospects for Americans.<sup>65</sup>

The nuclear agreement gives India access to reprocessing nuclear fuel obtained from outside sources, a concession the US now exclusively allows to Japan and European nations. According to the agreement, if the United States cuts off the supply for any reason, especially if India conducts a nuclear weapon test, it will also assist India in finding fuel. According to numerous academics, the USA's readiness to take these actions stems from its recent recognition of India as a key strategic bulwark and counterweight to Pakistan's extreme instability and unpredictability as well as the rise of China as a global force.

### ***2.5.8 India's Strategic Importance as a Check on China's Ambitions and Indo-US Relations***

India is a natural barrier and sentinel on the trade route between East Asia and the Middle East thanks to its million-man army, the fourth-largest in the world, and its blue-water navy. According to the United States, an economically and demographically strong India might act as a check on Beijing's global great-power ambitions as well as its growing influence in Southeast Asia.<sup>66</sup> David Mulford, the USA ambassador to India, has also acknowledged that the United States' efforts to DE-hyphenate its relations with Pakistan and India by pursuing such policies toward India have been mostly successful.<sup>67</sup>

Due to this duplicity, it can be said that signing the NPT or the IAEA safeguards system alone does not guarantee a country access to full fuel cycle facilities. A country's political system and proximity to Western nations will also be taken into consideration when determining whether it is suitable for access to dual use, potentially sensitive technologies.

Yet, according to some other academics, India's strategic liberalization was foreshadowed by the July 18, 2005 agreement for a civil nuclear deal with the United States, which also guaranteed significant advantages like the import of nuclear fuel, among others. They believe that an empowered India, free of restrictions imposed by technology denial and the status of a strategic pariah, would not only emerge as a significant state in the twenty-first century but would also aid in the realization of multi-polarity on a global scale.<sup>68</sup>

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<sup>65</sup> The Process of Negotiation of the Nuclear Deal/123 Agreement (India): Reshmi Kazi, *Indo-US Nuclear Deal*, 2013

<sup>66</sup> Sadanand Dhume, "Is India an ally?," *Commentary* 125, no. 1 (January 2008).

<sup>67</sup> Amit Baruah, "Waiting for India to process nuke deal, USA," *Hindustan Times*, January 30, 2008.

<sup>68</sup> C. Uday Bhasker, "N-Deal Enters Choppy Waters: the Implications," *Rediff India Abroad*, August 19, 2007.

## 2.6 Benefits for India

### ***2.6.1 India's Landmark Victory in Manipulating Nonproliferation Laws and Implications for Global Nuclear Power Dynamics***

For India, of course, this was no ordinary victory. In being able to have all laws manipulated on nonproliferation, and plus having been able to get recognition as a member of the nuclear club at the price of its own choosing was a moment to celebrate. And India wasn't alone in its festivity over what it had been able to achieve and walk away with. The foreign minister of Australia, Stephen Smith had divulged the reason for such a special treatment. For him, that India could carry its case successfully through NSG procedures, despite a lot of flaws, had to do with India's rise as a global power. He further made it clear that no other country would have got such a leeway and carte Blanche to be able to get what it wanted without committing itself on global initiatives to limit proliferation. He went on to say that he looked forward to an extended cooperation between both sides on dual use of technology. But not everyone was so eager to celebrate this 123 agreement, which had sent shock waves across other countries like Pakistan that saw an existential threat to its security coated to the contents of the agreement.

### ***2.6.2 Concerns and Criticisms Surrounding the Indo-US Nuclear Deal: Safeguards, Fissile Material, and Diversion Risks***

More concerns emerge due to ever expanding energy needs of India and owing to a more assertive China, especially with US and allies stuck in a war in Afghanistan; The US- India nuclear deal is considered a watershed moment for India. A lot of forums around the world showed dismay over the deal and pointed in the direction where things seemed to have gone wrong. For instance, the issue of comprehensive safeguards vs facility specific safeguards continued to create decibels of dissent in quarters concerned.

For example, one of the many complaints was that the protections only apply to facilities and materials created by India commencing when the agreement was wrapped up. It excludes India's fissile material created throughout the previous many decades of nuclear activity. Furthermore, according to the CRS assessment, "a fundamental question is how India, in the absence of full-scope security measures, can provide enough trust that USA peaceful nuclear technology will not be repurposed to nuclear weapons purposes."

### ***2.6.3 Anomalies and Contradictions in the Indo-US Nuclear Deal: Implications for Nonproliferation Regime and India's Nuclear Status***

Besides this, there is an array of anomalies that remain unanswered. On the one hand, NPT, CTBT, FMT and FMCT required the world to cut back on the nuclear tilt. At a time, when the nuclear marathon was feared to spiral out into becoming a headache for the international community; giving India a nepotistic treatment by USA got many heads rolling and brooding over the complications that this deal in future would have on nonproliferation regime and its efforts. But despite various treaties and their conditions to the contrary, Bush Administration chose political considerations over the global need to curb this technology.<sup>69</sup>

It's interesting to note that the United States has now implicitly recognized India as a responsible state with sophisticated nuclear understanding, but it has resisted admitting India as the sixth nuclear weapons state in a very diplomatic manner. The nuclear accord is notable in part because of the US position. It is evident that America has committed to assist India in obtaining the same advantages and benefits as other nuclear-armed powers. The United States would also provide India complete cooperation in the civil nuclear energy sector, access to fuel supply, knowledge transfer, etc., but it would not want to jeopardize the NPT's terms by designating India as the sixth nuclear power.<sup>70</sup>

According to some, the current US policy would, like the NPT, divide non-signatory states into two categories: "responsible" non-nuclear states like Japan and the EU, which are permitted to conduct plutonium reprocessing and uranium enrichment for their civilian programs, and other nations like Iran, which are denied this right due to the perception that they pose a security threat.<sup>71</sup>

### ***2.6.4 Indo-US Nuclear Deal: Engagement vs. Isolation and Concerns over Monitoring and Fissile Material Production***

Talking about the deal, Dawn reported on the deal on Nov, 4, 2005 quoting Bush administration as follows:

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<sup>69</sup> Wendy Frieman, *China, Arms Control, and Nonproliferation* (London: Psychology Press, 2004).

<sup>70</sup> Ana Swanson, "USA Courts India as Technology Partner to Counter China," *The New York Times*, January 31, 2023

<sup>71</sup> T.V. Paul, "The USA-India nuclear accord: implications for the nonproliferation regime," *International Journal* 62, no. 4 (Autumn 2007): 854.



Under Secretary of State for Political Affairs Nicholas Burns testified before the Senate Foreign Relations Committee on Wednesday that it would be far simpler to oversee New Delhi's nuclear energy efforts inside the international framework than outside of it. The Bush administration told the US Senate that by reaching a nuclear agreement with India, Washington wanted to work with New Delhi on this subject rather than isolate it.

On the other hand, US going out of its way to grant India a clean chit on deal raised many an eyebrow. The aforementioned study also made mention of another worry around the world, especially, concerning the flaws that were left untouched to get India the deal any way. On this particular aspect, it read: "The agreement does not mandate that India cap or restrict its production of fissile material. The United States, France, Britain, and Russia are among the main nuclear powers, and they are all seeking to reduce their output at the same time as this."<sup>72</sup>

Many analysts around the world considered it as a "surrender" by US on its traditional stance over NPT and cast doubts around its commitment towards containing the spread of nuclear technology. A vortex of concerns in the wake of the nuclear deal came up in different ways. Some of the key questions raised pertained to this question: the United States might have achieved its geostrategic goals by strengthening its military, scientific, and commercial connections with India without compromising crucial nonproliferation policy tenets. It is subject to considerable debate as to whether the proposed Indian concessions were significant enough to warrant the concessions guaranteed by the US and as to whether the civil nuclear measures that the US and India agreed to adopt will, overall, benefit international nonproliferation efforts. China and Pakistan were suspicious about the deal and about an undue warmth extended to India. At different forums, Pakistan decried the deal as a step towards accelerating the nuclear arms race in South Asian region, which is already teaming up with a lot of issues.

#### ***2.6.5 India's Ambitious Nuclear Energy Expansion and International Collaborations: Potential Benefits and Limitations***

A study on India's nuclear power initiatives stated that the nation aimed to treble the capacity of nuclear energy potential to become the third-largest independent economy free of polluting fossil fuels by 2024. India has 15 nuclear reactors that are under the IAEA's jurisdiction. The

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<sup>72</sup> Lawrence Scheinman, *The International Atomic Energy Agency and World Nuclear Order* (Washington D.C.: Routledge, 1987).

scope of India's strategy was further broadened by this accord, allowing her to enter into similar deals with additional international partners under the NSG-waiver.<sup>73</sup>

By establishing a long-term civilian nuclear energy agreement with nations like Russia, Australia, Argentina, South Korea, Kazakhstan, the UK, Sri Lanka, Japan, Canada, Vietnam, Bangladesh, and France, India is now authorized to import uranium. Both nations agreed to cooperate in a variety of areas related to international security, including efforts to prevent the spread of WMDs, their delivery methods, and access to WMDs by terrorist organizations and non-state actors.

The argument is also made that while nuclear energy could help India in certain ways with its energy issues, it won't have a significant impact on the country's energy demands and would only make a little contribution to meeting its transportation sector's needs. The advocates for nuclear power, though, think that it may play an even greater role in the future.<sup>74</sup>

#### ***2.6.6 Nuclear Energy as a Sustainable Solution to India's Expanding Energy Needs and Environmental Challenges***

Using nuclear energy could meet India's expanding energy needs without increasing its reliance on Middle Eastern oil or excessively contributing to pollution and global warming. India's huge population is expected to double in size within 25 years, and its energy needs are expected to grow by four times that amount.<sup>75</sup>

Regrettably, while having just a relatively small percentage of the world's oil and gas reserves, India is home to 17% of the world's population. Hence, in the lack of a consistent source of power, homes and businesses rely mostly on expensive and limited energy sources like coal, natural gas, and petroleum to provide the electricity they need.<sup>76</sup> It is believed that India's dependence on imported oil, gas, and coal for the production of electricity, which is not a very practical alternative for meeting India's rapidly increasing electricity and energy needs, would also exacerbate the country's mounting pollution issues in addition to impeding its growth and development.

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<sup>73</sup> Ana Swanson, "USA Courts India as Technology Partner to Counter China," *The New York Times*, January 31, 2023

<sup>74</sup> Sam Thompson, "The NPT Regime, Present and Future Global Security: An American View," *Nuclear non-Proliferation and Global Security*, 2020

<sup>75</sup> Ashton B. Carter, "America's New Strategic Partner?," *Foreign Affairs* 85, no. 4 (2006)

<sup>76</sup> Rahul Tongia, "The political economy of Indian power sector reforms," *The Political Economy of Power Sector Reform*, 2007

### ***2.6.7 Nuclear Power as an Imperative for India's Energy Transition and Global Trends in Nuclear Energy Expansion***

Even though, coal would continue to be a significant source of fuel for electricity production, India would be forced, like other nations, to adopt cleaner forms of producing electricity due to rising prices for gas and oil as well as the need to manage and control the pollution problem. In reality, concerns over rising pollution levels have compelled up to thirty nations to restart their nuclear power facilities. With 103 nuclear power stations and 27% of the world's nuclear generating capacity, the United States now produces the most nuclear energy. Moreover, rising natural gas costs have led To obtain permit renewals for nuclear power plants in Germany, the UK, and the US.

China, which now has nine nuclear power facilities, has plans to construct 30 more nuclear power plants by 2020.<sup>77</sup> India has seen this deal as a way of meeting its energy demands due to the dearth of alternate forms of power generation and India's rising energy needs to keep up with its economic growth. On the other side, the US has been eyeing it as a tool to subjugate India to the demands of the nuclear regimes.

### ***2.6.8 Positive Implications and International Support for the Indo-US Nuclear Deal, Amidst Concerns and Opposition***

Given India's energy-related issues, it would appear that this deal has improved their relationship by achieving the goals of both nations. In addition to bringing India inside the IAEA inspection and control system and being economically advantageous for the United States, it would also help India end its isolation, assist it in acquiring high-tech, and lessen its reliance on oil from the Persian Gulf.<sup>78</sup> Mohamed El Baradei, the director of the IAEA, approved of the arrangement as a result.

Baradei believes that "the nuclear agreement would boost nuclear safety and would be significant and crucial for current attempts to solidify the non-proliferation regime, combat nuclear terror, and draw India closer as a vital partner in the non-proliferation regime."<sup>79</sup> The 45-member NSG, which is made up of France, Russia, and the United Kingdom, has unabashedly endorsed the Indo-US nuclear agreement. On the other side, NSG members China and Canada expressed their disapproval of this accord.

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<sup>77</sup>"India–US civilian nuclear energy cooperation," *India–US Relations in the Age of Uncertainty*, 2016

<sup>78</sup> Floyd L. Perry, "The Future of USA - India Relations," 1991

<sup>79</sup> "The Indo-US Nuclear Deal in the Context of Indian Foreign Policy: Lalit Mansingh," *Indo-US Nuclear Deal*, 2013

## Conclusion

The main reason for this deal is because the US wants to offset China's expansion in Asia, and the nuclear accord with India is one of the best moves the country can take in that regard. China's military capabilities enhancement is a big problem for a single superpower. This is how states challenge the present order in the global power system. India and the US have similar interests in order to oppose China's growing influence and power in the region, as well as global events. India saw the US as a strategic rival and China as a strategic adversary. With US support, India's stature in the region would improve. If the US decides to leave South Asia in the future, India will be left as the region's watchdog. The Indo-US nuclear cooperation deal provided the two countries' relations a boost, and they have been improving ever since.

The NSG, according to The Hindu, granted India a unique waiver as part of the pact, allowing it to form cooperation agreements with a dozen nations. This agreement was a historic point in Indo-US ties. It cleared the door for commerce, opened up India's economy, and urged Indian foreign policy to align with the US's during the Cold War. Most crucially, India obtained all of the benefits of NPT membership without any of the downsides, which typically included the elimination of all existing nuclear weapons. The IAEA does not monitor India's tiny uranium resource, allowing it to be utilized for its weapons development.

## Chapter Three

### Impacts of Indo-US deal on NPT Regime, IAEA and NSG

#### 3.1 Introduction

India has historically maintained its stance of not signing the CTBT<sup>80</sup> and the NPT<sup>81</sup>, citing both of these treaties' discriminatory nature,<sup>82</sup> interference with sovereign decision-making, and inability to force the permanent five members of the UNSC to fully disarm. Notwithstanding India's objection to nuclear regulations resulting from these accords, the US acknowledged India as a de facto and responsible South Asian nuclear power in 2005, with the latter ratifying the 123 Agreement in 2008<sup>83</sup>. As a result, India became the only non-signatory to the NPT and CTBT with whom the US has signed a 123 Agreement.

According to the Agreement, India agreed to segregate its civilian nuclear facilities from its weaponization programme and place the latter under the International Atomic Energy Agency's supervision (IAEA). India obtained considerable US collaboration and support in exchange for "full development and use of nuclear energy for peaceful purposes as a method of ensuring energy security on a stable, dependable, and predictable basis." Notwithstanding a number of geopolitical changes since 2008, and India's own questionable pledges to nuclear standards, India's ambiguous relationship with the nuclear non-proliferation framework - particularly with the United States - nearly goes unreported. As a result, this article re-contextualizes this anxiety-inducing connection by arguing that, notwithstanding the bilateral signature and operationalization of the Indo-US 123 Civil Nuclear Agreement in 2008,<sup>84</sup> India's nuclear identity in global governance remains far from normalized. The chapter examines the implications of this agreement for the NPT, IAEA, and NSG.

#### 3.2 Impact of Indo-US Deal on NPT Regime, IAEA and NSG

NPT was a multi-lateral regime to put a full stop to the spread of nuclear technology (1970). After the use of the atomic bomb during World War 2 by USA against Japan, the nuclear button got pressed around the world and it nearly led to full blown panic in powerful quarters. Despite efforts by USA to contain the acquisition of this technology; it couldn't stop other

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<sup>80</sup> "Comprehensive Nuclear-Test-Ban Treaty (CTBT) – UNODA," Welcome to the United Nations

<sup>81</sup> Aniruddha Saha, "Nuclear Stigma and Deviance in Global Governance: A New Research Agenda," *International Studies Quarterly* 66, no. 3 (2022)

<sup>82</sup> Jyotika Saksena, "Regime Design Matters: The CTBT and India's Nuclear Dilemma," *Comparative Strategy* 25, no. 3 (2006)

<sup>83</sup> Krishnamurthy Santhanam, "An Analysis of the Indo-US Civil Nuclear Cooperation Agreement," *South Asia at a Crossroads*, 2010

<sup>84</sup> "Negotiating the Section 123 Agreement," *The US-India Nuclear Agreement*, 2014

powers from acquiring it such as USSR, followed by Britain, France, China and India. By 1974, the technology was at risk of a spillover in hands that could have used it to a detrimental effect. To ensure that it didn't go out of control, bilateral efforts between USA and USSR began in the shape of SALT 1 and SALT 2 and multilateral efforts were embarked upon with talks on NPT.<sup>85</sup> NPT was assumed to curtail the spread of nuclear technology beyond countries that had already acquired it. NPT was a landmark understanding reached among the world stakeholders to cut back the further spread of technology.

The Indo-US agreement is illegal on both a procedural and substantive level, similar to many previous violations of the non-proliferation order. The NPT's fundamental trade off is that non-weapon nations get access to nuclear technology in exchange for foregoing the opportunity to produce nuclear weapons. This agreement makes it plain that no country would be allowed to access nuclear technology if it got nuclear weapons. This implicit understanding is clearly broken by the nuclear agreement. In terms of procedure, rather than simply a small group of nations, i.e.the NSG members, if such an agreement were to be approved at all, all 189 parties to the NPT should have voted on it.<sup>86</sup> India would be able to increase the size of its nuclear arsenal thanks to the agreement, which also permits it to acquire nuclear fuel for power reactors on the global market while using rare native uranium for nuclear weapons manufacturing.

The three major initiatives sought to be taken through NPT included:

1: Non-Proliferation of the technology

2: Disarmament

3: Peaceful use of nuclear technology for Civilian purposes such as generating power for national grids

To make sure that nuclear technology remains confined to safe hands, various bodies have been established at the international level under the watch of UNO such as IAEA and at other multinational forums such as NSG. One of the major tasks of NSG and IAEA is to keep a vigil over the transfer of nuclear technology under the strict watch of international protocols. NSG has established in 1974 is a league of nuclear and non-nuclear nations that ensure that

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<sup>85</sup> Indrani Bagchi, "India sees red as China voices n-deal concerns," The Times of India, September 2, 2008, <https://timesofindia.indiatimes.com/india/india-sees-red-as-china-voices-n-deal-concerns/articleshow/3433914.cms>.

<sup>86</sup> "Implications of the Indo-US Nuclear Deal for India's Energy and Military Programs: R. Rajaraman," *Indo-US Nuclear Deal*, 2013

sale, transfer or purchase of any nuclear weapons is done in strict compliance with the scope laid into place by treaties like NPT, CTBT, and FMT. Any state already a member of the nuclear club having military grade weapons or otherwise aspiring it for civil purposes must be abiding by the following yardsticks of IAEA to be able to have nuclear technology:

A: comprehensive safeguards agreements with non-nuclear-weapon state parties to the NPT.

B: Voluntary offer safeguards agreements with the nuclear-weapon state parties to the NPT.

C: Item-specific safeguards agreements with Non NPT states

But, in a hasty deal which didn't bother to look across and into the damage it would incur to the integrity of these international agencies; the deal was put a signature to by the negotiating parties. A multitude of studies afterwards on the deal stirred up a trail of confounding questions. Noting the haste and hustle up with which the deal was put into effect, Armcad .Org noted this on this botched up affair: "The India accord also had an adverse effect on the IAEA's credibility. Before any of its terms had been worked out, such as how much of India's nuclear programme would be placed under safeguards, what kind of safeguards India would accept, and what concurrent nonproliferation and disarmament obligations India would undertake, Director General Mohamed ElBaradei welcomed the potential deal the day it was announced. International efforts to improve the nonproliferation provisions of the agreement were effectively thwarted by ElBaradei's early and seemingly unqualified endorsement. Then, in 2008, when India and the IAEA were negotiating safeguards, ElBaradei appeared to suggest that the organization should accept parameters that were less stringent than what some experts in the safeguards section believed was reasonable".<sup>87</sup>

In addition to this, the same study put a question mark to the role of this mercantile and selective proliferation by NSG in these words:

Several additional NSG nations saw this financial incentive; others had their own commercial objectives. Germany, for instance, does not export a lot of nuclear material, though Siemens and other German companies do export components. Nevertheless, Germany backed the NSG-India agreement mostly to prevent India from favoring German companies over other ones in Indian state procurement. Along with Sweden, other nations who want to sell conventional weapons to India did as well. Smaller NSG states that might have ordinarily

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<sup>87</sup> O. N. Mehrotra, "Imminence of Indo-Pak Arms Race," Strategic Analysis 3, no. 11 (November 2012), doi:10.1080/09700168009425406.

viewed the nuclear agreement as severely harming the nonproliferation regime instead saw similar economic interests trickle down to them. The involvement of smaller NSG states was ultimately determined by their leaders' and national corporations' unwillingness to endure political-economic sanctions from the US, France, Russia, and India, according to discussions with several diplomats and lawmakers from these countries. These people said that their governments would have gladly sided with Germany if a powerful nation like Germany had vetoed the trade or demanded harsher conditions.

The crucial point is that the NSG, which has been the only cartel in the world created to prevent profit-taking on a delicate matter that may jeopardize global nuclear security,<sup>88</sup> can be badly damaged by the profit incentive. This cartel was established with the understanding that the risks of nuclear proliferation should be greater than any potential benefits from nuclear trade with the three Non NPT governments. Many other NSG members recognized this commercial incentive; some of them had business objectives of their own. Germany, for instance, does not export a lot of nuclear material, though Siemens and other German companies do export components. Nevertheless, Germany backed the NSG-India agreement mostly to prevent India from favoring German companies over other ones in Indian state procurement. As usual, commercial considerations won out over non-proliferation-related ones. Along with Sweden, other nations who want to sell conventional weapons to India did as well. Smaller NSG states that might have ordinarily viewed the nuclear agreement as severely harming the nonproliferation regime instead saw similar economic interests trickle down to them. But in the end, all of them focused on their basic economic motives despite having their "moments of truth."

Other forums too, critical of this favorable gesturing to India, have raised serious questions as to the problems and issues that it might lead to. The wheel of issues doesn't stop here and won't stop anywhere as more countries demanding to hop onto this exclusive nuclear bandwagon continue to plead their case, hoping to have the same sympathetic ears as were conferred upon India. The deal between India and US stirred up a trail of troubling questions for the whole world. For instance, under the scope of FMCT, and FMT, different countries had pledged to either limit the fissile material, or to eliminate it completely.

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<sup>88</sup> Jodeleit, Henrika, Pia Palamides, Florian Beigel, Thomas Mueller, Eckhard Wolf, Matthias Siebeck, and Roswitha Gropp. "Design and validation of a disease network of inflammatory processes in the NSG-UC mouse model." *Journal of Translational Medicine* 15, no. 1 (2017): 1-23.



### ***3.2.1 Impact of Indo-US Deal on NPT Regime***

The Indo-US nuclear agreement, formally known as the United States-India Civil Nuclear Agreement, had a significant influence on the NPT and the worldwide nuclear non-proliferation Regime. The 2008 agreement between the US and India aims to improve nuclear collaboration and commerce between the two nations, providing India access to civilian nuclear technology and fuel while avoiding some of the NPT's conventional requirements. This agreement generated concerns and has ramifications for the NPT's aims and principles, which include avoiding nuclear weapon proliferation and supporting disarmament.

**Violation of NPT Principles:** The NPT distinguishes between nuclear weapon states (NWS) and non-nuclear weapon states (NNWS), permitting the former to keep nuclear weapons while advocating for disarmament and non-proliferation in the latter. The Indo-US agreement provided India, a non-NPT state, access to civilian nuclear technology and fuel, thereby recognising India as a de facto nuclear weapons state but without needing it to follow the NPT's requirements. This violation of NPT rules jeopardized the treaty's key goal of avoiding the spread of nuclear weapons technology.

**Weakening of Non-Proliferation Efforts:** The agreement delivered a mixed message to the international community about the necessity of NPT adherence. It permitted a non-NPT country to gain from nuclear commerce and collaboration, thus lowering the motivation for other governments to abide by the NPT. This might have a detrimental impact on global efforts to reduce nuclear weapon proliferation.

**Impact on Non-Proliferation Norms:** The agreement with India established a precedent for other countries wanting nuclear technology without adhering to the NPT. This might erode the NPT's credibility and encourage other countries to pursue similar nuclear accords without fully committing to non-proliferation measures.

**Regional Security Concerns:** Because Pakistan and India are regional adversaries with nuclear weapons, the implications of the arrangement for regional stability and security were concerning. Pakistan maintained that if India was granted preferential status in nuclear cooperation despite not being a party to the NPT, Pakistan should be accorded the same treatment.

**Proliferation Risks:** Some critics of the agreement were afraid that India might shift civilian nuclear technology and materials to its military nuclear programme. India has both civilian

and military nuclear plants, and the absence of clear separation between these sectors has generated worries about potential nuclear abuse.

**Disarmament Objectives:** Article VI of the NPT asks for nuclear disarmament discussions among nuclear armed nations. The Indo-US agreement was considered as incompatible with the NPT's broader purpose of nuclear disarmament since it granted India access to civilian nuclear technology without exacting disarmament obligations.

In conclusion, the Indo-US nuclear agreement had a significant influence on the NPT and the larger global non-proliferation framework. It called into doubt the compatibility of nuclear cooperation agreements with the NPT's principles and purposes, thereby undermining the treaty's ability to prevent the spread of nuclear weapons technology and achieve disarmament.

### ***3.2.2 Impact of Indo-US Deal on IAEA***

The Indo-US nuclear deal, also known as the United States-India Civil Nuclear Agreement, had implications for the International Atomic Energy Agency (IAEA), an independent international organization responsible for promoting the peaceful use of nuclear energy and verifying compliance with nuclear safeguards and non-proliferation agreements. The impact of the deal on the IAEA can be understood from the following perspectives:<sup>89</sup>

***Safeguards Implementation:*** The IAEA's primary role is to ensure that nuclear materials and facilities are used for peaceful purposes and not diverted for weapons development. The Indo-US deal raised questions about how the IAEA would ensure the effective implementation of safeguards in India's nuclear facilities. Since India has a mix of civilian and military nuclear facilities, there were concerns about the potential for diversion of nuclear material from civilian to military purposes. The IAEA's ability to monitor and verify the separation of these facilities became a challenge.

***Precedent for Non-NPT States:*** The deal set a precedent for non-NPT states to receive nuclear cooperation and technology without adhering to the NPT's principles. This could potentially lead to other countries seeking similar agreements and bypassing the NPT's safeguards and non-proliferation requirements. This shift could complicate the IAEA's efforts to ensure consistent and robust safeguards across the global nuclear landscape.

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<sup>89</sup> Sein, Chaw Chaw, Khin Sandar Myint, and Yin Myo Thu. "Indo-US Relations: Indo-US Nuclear Deal and Its Impact." PhD diss., MERAL Portal, 2017.

**Enhanced IAEA Engagement:** The Indo-US deal placed additional responsibilities on the IAEA to monitor and oversee India's nuclear activities under the agreement. The IAEA had to establish specific safeguards and verification measures tailored to India's unique situation as a non-NPT state with both civilian and military nuclear facilities. This required the IAEA to adapt its safeguards approach to address the challenges posed by the deal.

**Strengthened IAEA's Role:** The deal highlighted the need for the IAEA to play a central role in ensuring that nuclear cooperation agreements align with non-proliferation goals. The IAEA's involvement in verifying the implementation of the Indo-US deal emphasized its role as an essential international organization in preventing the misuse of nuclear technology and material for military purposes.

**Challenges in Consistency:** The deal introduced a potential inconsistency in how the IAEA applies safeguards and verifies compliance with different countries. While NPT member states are subject to certain non-proliferation commitments, non-NPT states like India may have different requirements, potentially leading to varying levels of safeguards implementation. This could complicate the IAEA's efforts to maintain a consistent and unified approach to nuclear safeguards.

**Pressure on IAEA Resources:** The additional responsibilities associated with the Indo-US deal may have placed strain on the IAEA's resources and capacity. Developing and implementing safeguards measures tailored to India's situation would have required dedicated efforts and resources from the IAEA's safeguards division.

In summary, the Indo-US nuclear deal had several implications for the IAEA's role and responsibilities. It raised questions about safeguards implementation, highlighted the need for consistent non-proliferation standards, and emphasized the importance of the IAEA's role in ensuring that nuclear cooperation agreements align with global non-proliferation objectives.<sup>90</sup>

### **3.2.3 Impact of Indo-US Deal on NSG**

The Indo-US nuclear deal had a significant impact on the Nuclear Suppliers Group (NSG), a multilateral export control regime that aims to prevent the proliferation of nuclear weapons by controlling the export of nuclear-related materials, equipment, and technology. The deal's

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<sup>90</sup> Jaspal, Zafar Nawaz. "Indo-US Nuclear Deal: Altering Global Nuclear Order." *Strategic Studies* 28, no. 2/3 (2008): 18-38.

implications for the NSG were as follows:<sup>91</sup>

**Challenging NSG Principles:** The NSG operates on the principle that nuclear exports should only be allowed to countries that are party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). This principle aims to prevent the spread of nuclear weapons technology. The Indo-US deal, which allowed nuclear trade with India, a non-NPT state, challenged this core principle of the NSG and raised questions about the consistency of nuclear trade norms.

**Exemption for India:** The Indo-US deal led to a special exemption for India within the NSG framework. This exemption allowed NSG member states to engage in nuclear trade with India despite its non-NPT status. This departure from the NSG's established guidelines undermined the group's commitment to preventing nuclear proliferation and created a precedent that could potentially be exploited by other non-NPT states.

**Erosion of Consistency:** The exemption granted to India under the Indo-US deal created inconsistency within the NSG. While NSG member states were required to adhere to certain standards, India received preferential treatment without being bound by the NPT's obligations. This eroded the unity and credibility of the NSG's efforts to maintain a consistent approach to nuclear non-proliferation.

**Proliferation Concerns:** The deal's exemption for India raised concerns among NSG member states about the potential for nuclear material or technology transferred to India for civilian purposes to be diverted for military use. These concerns highlighted the risks of granting exceptions to non-NPT states without strong safeguards and verification mechanisms in place.

**Evolving NSG Guidelines:** The Indo-US deal prompted discussions within the NSG about revising its guidelines and criteria for nuclear trade. Some NSG members advocated for considering exceptions for other non-NPT states as well, arguing that a consistent approach should be established to address such cases. This raised questions about whether the NSG's existing principles were flexible enough to accommodate changing dynamics in the nuclear landscape.<sup>92</sup>

**Differing Views among NSG Members:** The Indo-US deal led to differing viewpoints among NSG member states. While some argued that exceptional cases like India should be considered, others were concerned about the implications of relaxing the NSG's criteria for

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<sup>91</sup> Jangir, Sunil Kumar. "Indo-US Nuclear Deal and 123 Agreements." *International Journal of Scientific and Research Publications* 2, no. 10 (2012): 1-6.

<sup>92</sup> Nautiyal, Annpurna. "The Indo-US Nuclear Deal: What is There?." *Strategic Insights* 7, no. 4 (2008).

nuclear trade. These differing views created divisions within the NSG and highlighted the challenges of maintaining consensus in a diverse group of countries.

***Pressure on Non-Proliferation Norms:*** The Indo-US deal's exemption for India set a precedent that potentially undermined the established non-proliferation norms and the credibility of the NSG's efforts. It raised questions about whether the NSG could effectively prevent the misuse of nuclear technology and material by non-NPT states.

In summary, the Indo-US nuclear deal had a significant impact on the NSG by challenging its principles, creating inconsistency, and prompting discussions about evolving guidelines for nuclear trade. The deal's exemption for India highlighted the complexities of balancing exceptional cases with the need for consistent non-proliferation efforts within the NSG framework.

### 3.3 The Nuclear Deal: A Setback for Non-Proliferation

Exempting India from giving in completely and comprehensively to these treaties; NSG and IAEA had demonstrated criminal complicity. This multiplied suspicion and let many voices raise themselves as to the leviathan of a nuclear race re-surfing its head. Although morality is a blank portion in a realistic world, yet a lay down of this standard does have the toxicity to bad name global forums like NSG and IAEA.<sup>93</sup>

Org, a peace project, gathered some important inquiries about the agreement. First, it brought attention to the issue that "India already has about 500 kilograms of weapons grade plutonium, enough for about 100 nuclear warheads." Additionally, it possesses a stockpile of 11.5 tonnes of reactor-grade plutonium that was created from the spent fuel from its power reactors. This quantity of plutonium would also be exempt from safeguards under the agreement. Additionally, India would not put any safeguards in place for its Prototype Fast Breeder Reactor, which would begin operating in 2010. It will generate weapons-grade plutonium and be powered by reactor-grade plutonium. The rate at which India now produces weapons-grade plutonium would grow as a result by around a factor of four.<sup>94</sup>

Under FMCT, CTBT, non-signatories such as India were to be put under a careful watchfulness so that these countries could never run away using their security concerns as

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<sup>93</sup> Indrani Bagchi, "India sees red as China voices n-deal concerns," *The Times of India*, September 2, 2008, <https://timesofindia.indiatimes.com/india/india-sees-red-as-china-voices-n-deal-concerns/articleshow/3433914.cms>.

<sup>94</sup> O. N. Mehrotra, "Imminence of Indo-Pak Arms Race," *Strategic Analysis* 3, no. 11 (November 2012), doi:10.1080/09700168009425406.

ways to ditch international eye. Pakistan has had to face the wrath in different ways through Pressler and Brown amendments for pursuing atomic energy. While talking about this, Arms control.org in research published titled, "Confrontation and Retreat: The US Congress and the South Asian Nuclear Tests - Key Legislation by Robert M. Hathaway" says that Pakistan fell to merciless punching of US due to laws in place on nuclear technology such as "Symington amendment".<sup>95</sup>

Adopted 1976. Sec. 101 of the Arms Export Control Act, formerly Sec. 669 of the Foreign Assistance Act of 1961 as amended" and "Glenn Amendment".<sup>96</sup>

Adopted 1977. Sec. 102 (b) of the Arms Export Control Act, formerly Sec. 670 of the Foreign Assistance Act of 1961 as amended", both of which were used by Jimmy Carter and Clinton respectively to chastise Pakistan.

But, on Indian nuclear deal with US, it bypassed even the stringently applied international standards to placate India and to seek its political interests in the South Asian Region, where it treats Pakistan as a bad cop and India as a good cop.

Making and breaking international rules was involved in the Indo-US nuclear pact and its evolution into the NSG-India nuclear accord. The agreement amounted to selective non-enforcement because it exempted India from the regulations. The US was correctly highlighting the necessity of stricter enforcement of international laws at the same time. Less powerful nations were rightfully requesting that the agreements underlying the nonproliferation system be equitably applied. This viewpoint suggests that the US, notably, is more important than India when considering the significance of the nuclear agreement with that country. India looked for what its rulers want. It was incumbent to others to safeguard the benefit to everyone on earth that results from the nuclear order based on rules. The NPT's future is more unclear than ever.<sup>97</sup>

The India accord also had an impact on the IAEA's independence. Before any of its terms had been worked out, such as how much of India's nuclear programme would be placed under safeguards, what kind of safeguards India would accept, and what concurrent

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<sup>95</sup> Mahmoud Sharei, "The Treaty on Non Proliferation of Nuclear Weapons (NPT) Regime, and the Legality of Nuclear Weapons in International Law: Is There the 'Good Faith' in a Legal Regime for Nuclear Disarmament?," SSRN Electronic Journal, August 2010, doi:10.2139/ssrn.2742475.

<sup>96</sup> Nina Tannenwald, "Justice and Fairness in the Nuclear Nonproliferation Regime," *Ethics and International Affairs* 27, no. 3 (2013), doi:10.1017/s0892679413000221.

<sup>97</sup> Sara Z. Kutchesfahani, "The Nuclear Non-Proliferation Treaty's Contribution to Global Nuclear Order," *Global Nuclear Order*, 2018

nonproliferation and disarmament obligations India would undertake, Director General Mohamed ElBaradei welcomed the potential deal the day it was announced. International efforts to improve the nonproliferation provisions of the agreement were effectively thwarted by ElBaradei's early and seemingly unqualified endorsement. But, in 2008, when India and the IAEA were negotiating safeguards, ElBaradei appeared to suggest that the agency should accept parameters that were less stringent than what several experts in the safeguards division believed was reasonable.<sup>98</sup>

The US and India's historic nuclear agreement will undoubtedly have significant effects on nuclear security and non-proliferation. In actuality, India's exemption from NSG regulations and IAEA safeguard requirements does not enlist it in the nuclear non-proliferation regime. Hence, the agreement reached between the NSG and India significantly diminish the usefulness of the NSG, weaken the already troubled NPT, and expedite the collapse of the nuclear non-proliferation regime of the twentieth century. In conclusion, a new era of nuclear expansionism and a new nuclear order are about to begin in the world.

### 3.4 Future of Nuclear Proliferation Related to US India Nuclear Deal

The hypocritical approach taken by different powers and with a selective vision to get some countries to accede to non-proliferation by letting others get away to deals, India has created an atmosphere of distrust. On the one hand, countries like Iran and North Korea are being forced to give in on their nuclear arsenals for a peaceful world; and on the other hand, allowing certain countries like India to get deals in exchange for peanuts in terms of non-proliferation safety standards is vitiating the international atmosphere beyond repair. UNDIAR also expressed such fears in its review to CEND inaugural summits that the effort for a reinvigorated nonproliferation regime should be paced up. It spoke out its fears saying clearly.<sup>99</sup>

The debate at these initiatives' first meetings, held in Stockholm and Washington in the early summer of 2019, focused on the fact that the international environment was getting more complicated and that the NPT and other frameworks for nuclear disarmament needed to be revitalised. The institutional structure for international nonproliferation and weapons control is in fact becoming more and more complex to evaluate as new programmes emerge and

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<sup>98</sup> "Fissions in the nuclear order: the India–US Nuclear Deal and the nuclear-governance regime," *Strategically Created Treaty Conflicts and the Politics of International Law*, 2014

<sup>99</sup> Saira Bano, "The India–US Nuclear Deal: Norms of Power and the Power of Norms," *The Social Construction of State Power*, 2020, doi:10.1332/policypress/9781529209839.003.0005.

overlap with already established ones. Political agendas are rapidly replacing universal agreements with more specialised agreements that don't always follow the consensus norm or aim to be entirely universal. More so, with industries given precedence over global concerns, there is a high probability that in times ahead, may be the will to stand up for the world is replaced with the will to make massive profits, which will but cast down the river all gains and pains so far made for denuclearization the world.<sup>100</sup> The viability of the multilateral framework for arms control and nonproliferation depends on how this increasing variety in agreements can be absorbed. By enabling some degree of symbiosis between more established conventional tools and fresher efforts, the following three paths—while not necessarily mutually exclusive—could influence the future arms control and nonproliferation framework. But these concerns apart, the special status for some nations and a sort of unconcern for the others is only likely to intensify and widen the lines of divide and may take a few nations to think on the treatment being meted out them as downright unjust. For example, why did Trump give up on JCPOA with Iran and why is North Korea being singled out as the only threat to the world.<sup>101</sup>

The central problem in the NPT regime is deep down the cynical approach it has taken since the adoption of NPT protocols. It was assumed that nations that had already gone ballistic would retain it for the dual purpose. While non-nuclear nations, though being perfectly allowed to carry out enrichment as per the canons of NPT treaty which were looked down upon with disdain and not allowed to acquire the technology even within the laid down limits of NPT protocols.<sup>102</sup>

This exacerbated disquiet among some nations that began enriching clandestinely for civilian purpose but were not allowed to, because they were either considered rogue or too little to be given that importance when it came to global chess of power. The missing fairness question forced states like Iraq and Syria to venture into the nuclear enrichment, but were completely boycotted and even decimated from having their due share of civil technology, just because America was reluctant to walk its mind on it and to borrow from George Orwell, in a world where some equals are more equals than others; discontent and discord at some point is a certain disturbing reality that can't be taken off unless it has plodded along its due path.

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<sup>100</sup> Somini Sengupta, "Interests Drive USA to Back a Nuclear India," The New York Times, December 10, 2006, <https://www.nytimes.com/2006/12/10/world/asia/10india.html>.

<sup>101</sup> Mahmoud Sharei, "The Treaty on Non Proliferation of Nuclear Weapons (NPT) Regime, and the Legality of Nuclear Weapons in International Law: Is There the 'Good Faith' in a Legal Regime for Nuclear Disarmament?," SSRN Electronic Journal, August 2010, doi:10.2139/ssrn.2742475.

<sup>102</sup> Ibid.



Countries like Pakistan that have seen direct impacts of 123 nuclear deal descend upon them have voiced their concerns.<sup>103</sup> But, since global consciousness is selective and reciprocating more towards India than any other country; all voices fell on deaf ears.<sup>104</sup>

The agreement with India would allow India to produce significant quantities of fissile material and nuclear weapons from unprotected nuclear reactors, according to Pakistan's national command authority in 2007. Immediately after the deal saw ink on it, Pakistan spoke out in dissent to this international wheeling and dealing concerning non-proliferation. But Pranab Mukherjee dismissed Pakistan's concerns as hyper and overruled them as baseless and that is all India could say and do, since it got an edge over Pakistan that till today remains unsurpassed.<sup>105</sup>

To quell its part of worries on an arms race in subcontinent, Pakistan has demanded to be given equal footing on such a deal as with India to US. But sadly, US uses different lenses for scanning reality of things. In 2015, for example during the seventh round of the US-Pakistan security, strategic stability, and nonproliferation, Pakistan pressed upon the same entitlement.<sup>106</sup> The answer to Pakistan was as usually cold and non-receptive to its concerns. Of course, the answer, as usual, was that the deal with India had China factor at the core, rather than anything else.<sup>107</sup>

While India got itself recognized with all its strategic concerns taken into consideration by USA; that of Pakistan's have not just been overlooked, but also gone unattended to as well. Most likely, even Pakistan knows that its claimer against this deal and its voice on its concerns do little to give it even the slightest of what India was able to pocket. Currently, India importing uranium from Canada, Russia, Namibia and Australia and India and US defense trade has increased from 1\$ billion to 15\$ billion since 2008. Besides this, India through this deal had been given with a fertile ground to make qualitative and quantifiable

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<sup>103</sup> Somini Sengupta, "Interests Drive USA to Back a Nuclear India," *The New York Times*, December 10, 2006, <https://www.nytimes.com/2006/12/10/world/asia/10india.html>.

<sup>104</sup> Reaching Critical Will, "Indo-US nuclear deal," Reaching Critical Will, last modified 2022, <https://www.reachingcriticalwill.org/resources/fact-sheets/critical-issues/5451-Indo-US-nuclear-deal>.

<sup>105</sup> Sharon Squassoni, "The USA-Indian Deal and Its Impact," *Arms Control Association | The Authoritative Source on Arms Control Since 1971*, accessed December 21, 2022, <https://www.armscontrol.org/act/2010-07/Indo-USn-deal-its-impact>.

<sup>106</sup> Saira Bano, "Pakistan: Lessons from the India-US Nuclear Deal," *The Diplomat*, June 22, 2015, <https://thediplomat.com/2015/06/pakistan-lessons-from-the-india-us-nuclear-deal/>.

<sup>107</sup> Tom Coppen, "The Law of Arms Control and the International Non-proliferation Regime," *Brill* 29 (January 2017), doi:10.1163/9789004333352.

change to its nuclear arsenal.<sup>108</sup>

Traditionally, USA has acted as a go between Pakistan and India on different crisis, thus, it could have and should have played a much bigger role in making sure that in going for an exclusive treatment of India; it shouldn't have been seen to be brushing Pakistan's grievances on the deal under the carpet. Already, the South Asian Region has been designated as a nuclear flashpoint, and even the impression of a slight imbalance could have ramifications far beyond the political considerations later on. Since US mindset is the product of a Cold War, it wallows in its own self constructed fears and has its late localized and an outdated version goals and allies and partnerships through which it has sought to ride on the shoulders of the global community.<sup>109</sup>

## Conclusion

In the contemporary age, the world is in chaos and plagued by problems because of nuclear arms race; however, compromised approach towards non-proliferation would be the last thing that the peaceful world would want to see. But political and economic considerations seem to weigh in on more than anything else, when the 123 agreement was signed. Since India was a big market and beginning to diversify its arms purchase away from traditional Russian made arms; American military or defense companies too were willing to export arms to India as well.

The atomic weapon cannot be used if there is just terror. Man has always used weapons despite the terror they may cause. Over time, a defence has been developed for every new weapon. According to Baruch's crisis plan, we represent not just our governments but also, and more broadly, the peoples of the entire world. We must always keep in mind that while governments may be owned by the people, the people are not owned by the governments. We must heed their requests and the global cry for safety and security.

However, an India-specific deal didn't mean that other non-signatories wouldn't demand such a reception to their concerns. In 2007, Israel had circulated a “non-paper” to the NSG members asking them for a criteria-based approach to its weapons as well, so that it could also benefit from civil-nuclear trade. Pakistan had not only objected to the deal, but to

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<sup>108</sup> George Perkovich, "Global implications of the USA-India deal," *Daedalus* 139, no. 1 (2010), doi:10.1162/daed.2010.139.1.20.

<sup>109</sup> INDRANI BAGCHI, "India sees red as China voices n-deal concerns," *The Times of India*, September 2, 2008, <https://timesofindia.indiatimes.com/india/india-sees-red-as-china-voices-n-deal-concerns/articleshow/3433914.cms>.

continue to cling to its demand of being given the same treatment as India. But for Washington, it's not about proliferation or non-proliferation anymore; it's about how they appease those countries that they count upon for their political mileage. This increased trust deficit has since showed up strongly, and the likelihood of major powers going light on the nuclear threat is coming out to life with countries demanding for nuclear parity.

Russia threatens to press on the nuclear button on Ukraine war. For decades, Vienna declaration held countries back from using nuclear weapons; however, due to Nonrealistic policies that create fear for security; countries are arming themselves up to the next level to deflect real or imaginary threats to their security calculus. World needs peace and peace needs trust and trust needs mutual understanding and mutual understanding requires countries to be maintaining the standards of nuclear parity and balance without throwing themselves or their favors for any particular country.

## CHAPTER FOUR

### Criteria Based Approach for New Aspirants

#### 4.1 Introduction

Due to its possible effects on the nuclear nonproliferation system and the aspirations of rising nuclear nations, the Indo-US nuclear agreement of July 2005 has generated a great deal of discussion among both supporters and opponents. The pact, according to critics, weakens trust in the nonproliferation framework, boosts the political significance of nuclear weapons, and creates unfavorable precedents for other governments seeking nuclear capability. Additionally, it is anticipated that the agreement may spark an arms race between India and China as well as between India and Pakistan, with potentially serious regional and global repercussions.

The nuclear accord that the US and India had been discussing for years was finally signed in July 2005. As part of the agreement, India, which is not a signatory to the NPT, was granted access to civilian nuclear technology and fuel. Critics claim that this move undermines the NPT's core objectives, which include avoiding the spread of nuclear weapons and supporting peaceful nuclear cooperation.

The negotiation of the Indo-US civilian nuclear energy cooperation agreement was a complex process due to the conflicting priorities of the two nations. While the Bush administration saw the deal as a means to strengthen strategic ties with India, many members of Congress insisted that it must also contribute to non-proliferation efforts. In India, critics were suspicious of the deal's potential to limit the country's nuclear capabilities. Beyond the technical aspects of the agreement, it also represented a shift in global power dynamics.

The agreement's detractors also claim that it would give India access to more nuclear weapons and expand their number, which might result in a nuclear arms race between China and Pakistan and India and Pakistan in Asia. The danger is that this deal might further destabilize the area and the global nonproliferation system because it is already a hotbed for geopolitical conflicts.<sup>110</sup>

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<sup>110</sup> George Perkovich, "Faulty Promises: The U.S.-India Nuclear Deal," Carnegie Endowment for International Peace, accessed March 9, 2023, <https://carnegieendowment.org/2005/09/07/faulty-promises-u.s.-india-nuclear-deal-pub-17419>.

In addition to the potential regional implications, the Indo-US nuclear accord also raises broader questions about the criteria-based approach that should be followed when it comes to emerging nuclear aspirants. The agreement has set a precedent for other states seeking nuclear capabilities to pursue similar agreements that may exempt them from the NPT and other nuclear trade regulations. Critics argue that this sends a dangerous message to the global community and could encourage other states to pursue nuclear weapons, which could have severe implications for global security and stability.

Despite the controversy surrounding the Indo-US nuclear accord, there are supporters who argue that the agreement is a necessary step towards strengthening the strategic partnership between the United States and India. They believe that India is a responsible nuclear power and that providing them with access to civilian nuclear technology and fuel will help promote clean energy and reduce carbon emissions.<sup>111</sup> However, the potential implications of the accord on the global nonproliferation regime and the broader geopolitical landscape cannot be ignored, and the debate over its merits and drawbacks is likely to continue for years to come.

#### 4.2 Regional Aspirants

Numerous elements, including as oil, religion, narcotics, the weapons trade, and ethnic irredentist security conflicts, have an impact on the complicated and interrelated character of international relations in Asia. Within this context, the issue of regional nuclear aspirants is of particular concern, given the potential implications for both global norms such as arms control and national security considerations such as military power and prestige.<sup>112</sup>

With the emergence of sub-regional centers of gravity that offer both regional and sub-regional paths, the borders of the Asia-Pacific area have expanded and changed. Each path offers a unique method of interaction that allows for progression in terms of philosophy, trade, and military might. This implies the possibility of numerous regional nuclear aspirants, each with distinct strategic objectives and drivers.

In terms of specific countries, it is worth noting that the Korean Peninsula, which has long been a source of tension and concern in the region due to North Korea's nuclear weapons program. In the Indian Subcontinent, where India's nuclear weapons program has long been a

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<sup>111</sup> Dinshaw Mistry and Sumit Ganguly, "The Indo-US Nuclear Pact: A Good Deal," *Current History* 105, no. 694 (November 1, 2006): 375–78, <https://doi.org/10.1525/curh.2006.105.694.375>.

<sup>112</sup> Ralf Emmers, review of *Review of Regional Security Structures in Asia*, by Ashok Kapur, *Contemporary Southeast Asia* 25, no. 3 (2003): 508–11.

source of controversy and concern for global nonproliferation efforts. Pakistan, which also possesses nuclear weapons, is located in close proximity to India and is another potential regional nuclear aspirant. Other nations in the region could also have plans to acquire nuclear weapons or develop their current nuclear capabilities in addition to those mentioned above. For instance, Iran, which lies near the Persian Gulf, has been under close attention because of its nuclear program.<sup>113</sup>

India and Pakistan's relationship with the NSG has been a significant issue for both countries.

India, which has not ratified the NPT, has been attempting to join the NSG in order to acquire access to nuclear materials and technology for its civilian nuclear program. India may gain more credibility as a responsible nuclear state as a result of joining the NSG.

On the other side, Pakistan has been trying to stop India from joining the NSG, claiming that India's nuclear program is opaque and that its admission in the NSG will further destabilize the area.

The NSG's export restrictions have also interfered with Pakistan's and India's nuclear initiatives. In retaliation for its nuclear tests in 1998, the NSG imposed limitations on India that restricted its access to nuclear technology and materials. These restrictions were lifted in 2008 as a result of a civil nuclear cooperation deal between India and the US.

Pakistan has also faced restrictions on its nuclear program due to the NSG's guidelines. In 2004, the NSG imposed restrictions on exports to Pakistan after the country was found to be involved in nuclear proliferation activities.

In summary, the NSG's guidelines and decisions have had significant impacts on India and Pakistan's nuclear programs and their relationship with each other.<sup>114</sup>

#### ***4.2.1 Pakistan***

The United States and India's nuclear accord from 2005 has a significant impact on both national and international affairs. The pact has significant consequences for other countries, particularly Pakistan. In spite of not being a party to the Treaty on the NPT, it was designed to enable India to purchase nuclear fuel and technology from the US.

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<sup>113</sup> Ibid.

<sup>114</sup> Ibid.

Pakistan has traditionally seen India as its main opponent in the area, and the Indo-US nuclear accord has made it much tougher for Pakistan to maintain its long-standing goal of avoiding becoming a satellite state. With more diplomatic clout as a result of the agreement, India is now able to more easily claim its status as a major world power. This has completely changed the situation in India's favor, making it more difficult for Pakistan to convince India of its position.

Since the Kargil conflict, Pakistan has come to be viewed more and more as a regional troublemaker, and the Indo-US nuclear pact has made it much more difficult for Pakistan to defend its interests. The pact has given India additional negotiation leverage on issues like terrorism and extremism, where the US and thus all Western countries are likely to back New Delhi even more outspokenly in the future. Pakistan is currently by itself in its hunt for a legitimate way to join the nuclear club.

One example is the NPT. The necessity for a 5+2 formula in India is still present, although it has significantly decreased—at least temporarily. Pakistan is now on its own in the search for a legal entry point into the nuclear club. Now, New Delhi has little reason to support Pakistan's position on the matter. The Indo-US nuclear agreement has had a huge impact on global politics as well as shifting the regional power balance in India's favor.<sup>115</sup>

The Indo-US nuclear pact has further exposed the US's approach to nuclear proliferation, which has come under fire for making artificial distinctions between acceptable and undesirable nuclear activities. Despite not being a party to the NPT, the US continues to fund India's nuclear program, casting doubt on the country's dedication to international nonproliferation efforts. This has further damaged the NPT's and the wider nonproliferation regime's credibility.

The Indo-US nuclear deal has also had implications for other countries in the region. The deal's effects on regional stability have alarmed China, which has long considered India as a strategic threat. Additionally, China has been hesitant to back India's application to join the Nuclear Suppliers Group (NSG), a confederation of nations that regulates the transfer of nuclear technology and materials. The Indo-US nuclear deal has made it more difficult for China to maintain its position on this issue.

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<sup>115</sup> Yusuf, Moeed. "The Indo-US nuclear deal: An impact analysis." *ISYP Journal on Science and World Affairs* 3, no. 2 (2007): 47-56.

The Indo-US nuclear deal has also had implications for US-Pakistan relations. Pakistan has long viewed the US as an ally in its efforts to counterbalance India's growing power. However, the Indo-US nuclear deal has raised questions about the US's commitment to Pakistan's security and has strained US-Pakistan relations. This has had significant implications for the US's efforts to stabilize the region and counter terrorism.

In conclusion, the Indo-US nuclear deal has had far-reaching consequences for regional and global politics. While it has given India added leverage in the region and has enabled it to assert itself as a global power, it has also had significant implications for other countries, particularly Pakistan. The deal has raised questions about the US's commitment to global nonproliferation efforts and has strained US-Pakistan relations. It has also had implications for China's position in the region and has undermined the credibility of the NPT and the broader nonproliferation regime.

The Indo-US Civil Nuclear Agreement, commonly referred to as the India-US Nuclear Deal, was a historic agreement reached in 2008 that gave India access to nuclear technology and fuel for its civilian nuclear program on the global market. The deal was significant for India as it ended India's nuclear isolation after it conducted nuclear tests in 1998.

The agreement also had substantial effects on Pakistan. If Pakistan perceived the agreement NPT, access to nuclear technology and fuel even though India isn't. Pakistan viewed this as a double standard and argued that it would create a strategic imbalance in the region.

Because it feared that the agreement would allow India to redirect its domestic nuclear resources to its military program, Pakistan also raised worries about the safety and security of India's nuclear program. Pakistan argued that this will spark a regional weapons race and further deteriorate the already tense ties between India and Pakistan.<sup>116</sup>

#### **4.2.2 India**

India wants to be included in the NSG because it would give it access to the latest nuclear technology, materials, and equipment for its civilian nuclear program. The NSG is an association of nations that controls the export of nuclear materials and technology and makes sure they are not used for military purposes.

India will gain more credibility as a responsible nuclear state as a result of joining the NSG. India has a track record of being a responsible nuclear state, having upheld the principle of

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<sup>116</sup> Oliver Meier, "The Indo-US Nuclear Deal: The End of Universal Non-Proliferation Efforts?," n.d.



never using nuclear weapons first and keeping a strong command and control infrastructure. India's admission to the NSG would serve as further evidence of its dedication to nuclear non-proliferation and responsible behavior.

Additionally, India would be able to take part in international discussions on nuclear non-proliferation and disarmament problems if it were admitted to the NSG. India has continuously pushed for nuclear disarmament and non-proliferation and is a prominent player in the international nuclear system.<sup>117</sup>

The NSG membership that India seeks will depend on a number of variables, including the political climate in the world, India's capacity to address nuclear program concerns, and the willingness of the member countries to support India's membership. Since 2008, various nations, notably the US, France, and Japan, have supported India's application for membership in the NSG. Regarding India's nuclear program, notably its history of nuclear testing and its unwillingness to ratify the NPT, various member nations have stated their worries. In the past, these issues have stopped India from joining the NSG.

India has taken steps to address these concerns, such as enacting stronger export control laws and improving its nuclear safety and security infrastructure. India has also continued to promote its policy of no-first-use of nuclear weapons and its commitment to non-proliferation.

Ultimately, whether India can get what it wants will depend on the NSG's decision-making process and the willingness of its member countries to support India's membership. While India has made progress in addressing concerns related to its nuclear program, the final decision on its membership will depend on the consensus of the NSG member countries.

#### 4.3 Approach Towards New Aspirants

The international nuclear security framework faces major issues when nuclear reactors are purchased by countries with a history of inadequate security and no security culture. For less experienced nations, the potential of unauthorized access to installations or the seizure of nuclear items may exist. Developing nations might not be trusted to have the kind of sophisticated fast reaction capabilities needed to defend nuclear installations. Years may pass before such regimes are able to create a security culture that is acceptable.

The effectiveness of the international treaties in this area is not as high as it is in the field of nuclear safety, both in terms of adherence and application. The CPPNM now only applies to

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<sup>117</sup> Chaim Braun and Christopher F. Chyba, "Proliferation Rings: New Challenges to the Nonproliferation Regime," *International Security* 29, no. 2 (fall 2004) (n.d.): 5–49.

international exports of nuclear material as the 2005 Amendment to the Convention, which would have expanded the system to each party's domestic market, is not yet in force. Due to the lack of openness and peer review requirements imposed by the treaties, the public is usually unaware of compliance with these accords.

All governments are required under UN Security Council Resolution 1540 to establish implementation strategies to stop nonstate actors from obtaining any kind of WMD, including nuclear and radiological weapons, and to recurrently update a Security Council committee on their progress. However, compliance by underdeveloped nations is sometimes patchy and insufficient. None of this inspires faith in the potential nuclear energy nations' capacity to oversee the security of any nuclear sites they may acquire.

To deal with the rise in nuclear facilities run by both nuclear energy states that already exist and aspirant emerging nations, global governance must be enhanced. By bringing all governments into nuclear governance frameworks for safety, security, and nonproliferation, educating them about their rights and obligations, and supporting their implementation and compliance, the International Atomic Energy Agency (IAEA) is in a good position to help with this mission.<sup>118</sup> The IAEA can also offer consulting services to newcomers to help them plan their programs, make sure they have the best regulatory, safety, and security measures in place, and ensure they are completely compliant with nuclear safeguards. However, the IAEA could be overwhelmed by requests for its services, and its member nations would need to raise its budget to keep up with the mounting pressure. The International Energy Agency and the International Renewable Energy Agency can offer greater guidance on alternative energy strategies in situations where nuclear energy is not the best option. In the end, the fear of climate change could encourage improved international cooperation on thorough national energy strategies.

States and businesses that provide nuclear power must contribute to improving global governance and guaranteeing the safe and secure use of nuclear energy. It argues that in addition to vendor states and their businesses, client states are also accountable for nuclear safety and security. A political context for reactor sales is provided by bilateral nuclear cooperation agreements between seller and receiving governments. Within this framework,

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<sup>118</sup> Rosenblatt, Eduardo, Eduardo Zubizarreta, Jan Wondergem, Elena Fidarova, and Joanna Izewska. "The International Atomic Energy Agency (IAEA): An active role in the global fight against cancer." *Radiotherapy and Oncology* 104, no. 3 (2012): 269-271.

businesses must operate while upholding the necessary standards for safety, security, and nonproliferation.

The manufacturers of the items make sure that they can be used as safely and securely as possible, especially since new entrants to the nuclear market are likely to buy the most recent nuclear technology. It recommends vendor states and businesses keep working to harmonize safety standards and regulatory practices for new reactor types and help the IAEA update its safety standards to reflect the new generation of reactors.

Given the possible effects of a significant accident or nuclear proliferation on the future of the nuclear sector, the vendor businesses have strong incentives to contribute to strengthening global governance. It suggests the creation of an international forum to bring together all nations and businesses engaged in the selling of nuclear reactors internationally. This forum might take into consideration an industry code of conduct that takes into account the nonproliferation, safety, and security histories of prospective buyers.

Last but not least, efforts to improve nuclear global governance may be met with skepticism from poorer nations, which implies that their participation in the reactor sales industry might assist to foster confidence. To lower tensions and foster more confidence in the safe and peaceful use of nuclear energy, the essay points out that a longer-term solution to the perceived disparity brought on by the acquisition of nuclear weapons by the most advanced nuclear energy nations will be required.

When using this strategy, several experts recommend being patient and persistent because it could take some time to see real effects. For instance, arms control agreements may take years to negotiate and ratify, and diplomatic initiatives may require sustained efforts over time to build trust and confidence between states.<sup>119</sup>

The Grossi formula, commonly known as the "9 point formula," put out a list of requirements for nations wishing to join the Nuclear Suppliers Group (NSG) but not being signatories to the NPT . Although it sought to solve the difficulties of including Non NPT states like India and Pakistan, it has encountered substantial opposition and difficulties. Some of the major criticisms involved:

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<sup>119</sup> "The Case for U.S. Nuclear Weapons in the 21st Century." In *Choice Reviews Online*, 53:53-5016-53-5016, 2016. <https://doi.org/10.5860/CHOICE.196269>.

- **Selective Treatment:** The formula's insistence on allowing Non NPT states like India access without forcing them to ratify the NPT runs against to the fundamental tenet of the NPT framework. The credibility of the NPT and the non-proliferation standards are both threatened by this selective treatment.
- **Undermining NPT:** The Grossi formula implies that commitment to the NPT is not necessary in order to gain the benefits of nuclear cooperation. The NPT's position as the cornerstone of international non-proliferation efforts is so compromised.
- **Double Standards:** According to critics, the formula establishes a double standard since it grants Non NPT governments access to civilian nuclear technology and commerce without subjecting them to the same degree of non-proliferation commitments as NPT members.
- **Regional Instability:** The conditions of the formula may promote regional instability, particularly in South Asia where Pakistan and India both have nuclear weapons. Giving India special consideration without attending to Pakistan's worries can make things more tense.

Given the issues the Grossi formula raises, a different strategy is necessary. The current NPT-based non-proliferation framework is crucial for maintaining international security. To guarantee that non-proliferation principles are preserved and enhanced, a shift is required. Globally, there is an increase in the demand for civil nuclear energy. All-important states, including India, Pakistan, China, and Russia, must be included in negotiations about nuclear cooperation. Any accords that are formed lose their credibility if some governments are excluded. An open discussion with all parties can help resolve concerns and stop additional instability in areas like South Asia where there are nuclear tensions. An egalitarian strategy lessens the likelihood of an arms race.<sup>120</sup>

A delicate balancing act between security, non-proliferation, and diplomatic concerns goes into developing criteria-based methods for regional nuclear powers seeking acceptance or participation in international non-proliferation regimes. Here are some possible standards that may be taken into account when determining whether to include regional nuclear powers:

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<sup>120</sup> Grossi, Davide, Dov Gabbay, and Leendert Van Der Torre. "The norm implementation problem in normative multi-agent systems." In *Specification and verification of multi-agent systems*, pp. 195-224. Boston, MA: Springer US, 2010.

### **1. Adherence to Non-Proliferation Norms:**

Regional nuclear powers should show their loyalty to the tenets of the NPT, even if they are not signatories. To fulfil this pledge, aggressive steps must be taken to prevent the spread of nuclear weapons and materials. By supporting the core objectives of the NPT, these countries contribute to the global effort to halt the proliferation of nuclear weapons and maintain stability.

### **2. Safeguarding Nuclear Facilities:**

The creation of a distinct division between civilian and military nuclear facilities is a crucial condition for regional nuclear powers. All stated civilian nuclear plants should voluntarily submit to IAEA safeguards, according to these governments. The adoption of an Additional Protocol, which broadens IAEA inspections, demonstrates a commitment to openness and responsibility, boosting trust in their nuclear operations across the world.

### **3. Nuclear Testing and CTBT:**

By ratifying the Comprehensive Nuclear-Test-Ban Treaty (CTBT), nations demonstrate their commitment to upholding the ban on all nuclear testing. By committing to refrain from conducting nuclear explosive tests, regional nuclear powers contribute to global security and show their dedication to halting the development of advanced nuclear capabilities.<sup>121</sup>

### **4. Support for Non-Proliferation and Disarmament:**

Regional nuclear powers should publicly back international initiatives to cut back on nuclear arsenals and advance disarmament. Participating actively in disarmament projects and conversations demonstrates their dedication to the larger objective of a safer and more secure world, beyond their individual interests.

### **5. Regional Security and Confidence-Building:**

It is essential to hold meaningful discussions with the nations that are next to us and to put confidence-boosting measures in place. These governments contribute to regional security and lessen the possibility of miscommunications that might increase tensions by cultivating diplomatic connections and avoiding inflammatory language or behavior.

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<sup>121</sup> Medalia, Jonathan E., and Foreign Affairs, Defense, and Trade Division. "Nuclear Weapons: Comprehensive Test Ban Treaty." Congressional Research Service, Library of Congress, 2003.

## **6. Contributions to Peaceful Uses of Nuclear Energy:**

A responsible attitude to nuclear capabilities is demonstrated by demonstrating a clear commitment to utilize nuclear technology for peaceful reasons, such as energy production and medicinal uses. This dedication guarantees that society will benefit from the advancement of nuclear technology without rising security worries.

## **7. Controls for Responsible Exports:**

To stop the spread of critical nuclear technology and materials, strict export controls are necessary. Regional nuclear powers contribute to global efforts to stop the spread of nuclear capabilities by enacting strict rules on the transfer of nuclear-related products.

## **8. Encouragement of International Accords:**

Participating in and respecting other pertinent international accords like the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC) shows a commitment to preserving international standards and fostering collective security.

## **9. Openness and Reporting:**

A commitment to openness and accountability is demonstrated by routinely reporting nuclear operations and sharing information with international organizations like the IAEA. Building confidence among the international community is facilitated by timely and accurate reporting.

## **10. Conflict Resolution Mechanisms:**

A readiness to participate in diplomatic discussions and settle unresolved conflicts or disputes in the region promotes stability and lessens the likelihood that tensions over nuclear issues would turn into hostilities.

## **11. International Consensus:**

Prior to granting membership, the NSG seeks agreement from its current members and key stakeholders. This demonstrates its commitment to multilateral decision-making and its responsible approach to nuclear cooperation.<sup>122</sup>

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<sup>122</sup> Hibbs, Mark. "Eyes on the prize: India's pursuit of membership in the Nuclear Suppliers Group." *The Nonproliferation Review* 24, no. 3-4 (2017): 275-296.

## **12. Verification and Compliance:**

Regional nuclear powers are dependable partners in the world effort to stop nuclear proliferation and preserve stability when they can demonstrate a continuous track record of compliance with international agreements and commitments.

### **Conclusion**

There has been a lot of discussion over the 2005 Indo-US nuclear agreement among advocates and detractors. Opponents contend that the pact threatens the nonproliferation system and might trigger an arms race between China, Pakistan, and India, while advocates contend that it improves the strategic alliance between the United States and India and advances renewable energy. The agreement has also raised broader questions about the criteria-based approach to emerging nuclear aspirants and the need for strengthened global governance in the nuclear field. In order to guarantee that all governments uphold their rights and obligations, it is crucial that all states cooperate in the future to enhance nuclear governance regimes for safety, security, and nonproliferation. The IAEA assistance with implementation and compliance is essential, and developing nations' participation in the reactor sales industry may contribute to trust-building. The debate over the Indo-US nuclear accord is likely to continue for years to come, and it is essential that all states work together to ensure that nuclear technology is used for peaceful purposes and that the global community remains safe and secure.

## **Findings, Recommendations and Conclusion**

### **Findings**

- The Indo-US 123 Agreement challenges the efficacy of the Nuclear Non-Proliferation Treaty (NPT) and the established nuclear non-proliferation norms and orders. It highlights how the agreement, allowing India access to civil nuclear technology despite its non-NPT status, undermines the NPT's principles.
- The US's approach of granting exemptions and waivers to non-NPT states, like India, under the 123 Agreements contradicts the core principles of the NPT, potentially causing concerns and mistrust among both nuclear and non-nuclear states.
- The 123 Agreement has raised concerns about the criteria-based approach to emerging nuclear aspirants and the impact of such agreements on regional strategic

stability, particularly in South Asia, where it has led to an arms race between India and Pakistan.

- The Indo-US nuclear deal, aimed at countering China's expansion in Asia, has impacted the dynamics of the region's power balance, raising questions about maintaining nuclear parity and balance and the potential for arms races between India, Pakistan, and China.
- The Indo-US nuclear deal highlights the geopolitical motivations behind such agreements, with the US using it as a tool to offset China's expansion in Asia, emphasizing the realist lens through which these agreements are driven.
- The global governance of nuclear technology, safety, and non-proliferation requires further strengthening and adaptation to evolving geopolitical dynamics. The need for nuclear governance regimes, better safeguards, international cooperation, and dialogue among states is essential to ensure responsible behavior in the nuclear field.
- The waiver provided to India has far-reaching consequences for global nuclear governance and norms, potentially motivating other non-NPT states to seek similar special treatment, raising questions about the NPT's future relevance and effectiveness in curbing nuclear proliferation.

## **Recommendations**

- **Strengthen NPT Review Process:** Enhance the effectiveness of the NPT review process to better address the implications of bilateral agreements like the Indo-US 123 Agreement. This could involve establishing mechanisms to evaluate and discuss the impact of such agreements on NPT objectives and non-proliferation efforts.
- **Promote Dialogue and Cooperation:** Encourage dialogue and cooperation among NPT member states, both nuclear-weapon and non-nuclear-weapon states, to address concerns and perceptions arising from bilateral agreements outside the framework of the NPT. This could involve organizing conferences, seminars, and workshops to facilitate discussions on the implications of such agreements and their impact on NPT objectives.
- **Strengthen Safeguards and Verification Mechanisms:** Enhance the effectiveness and universality of safeguards and verification mechanisms under the auspices of the International Atomic Energy Agency (IAEA). This could include promoting broader adherence to Comprehensive Safeguards Agreements and Additional Protocols,



ensuring robust verification measures, and addressing any gaps or limitations in the current safeguards system.

- **Promote Consensus on Non-Proliferation Norms:** Encourage Non NPT states to adhere to non-proliferation norms and principles, even in the absence of formal NPT membership. This could involve diplomatic efforts, confidence-building measures, and incentives to promote responsible behavior and discourage nuclear weapons proliferation.
- **Foster Multilateral Approaches:** Emphasize the importance of multilateral approaches to nuclear disarmament, non-proliferation, and peaceful uses of nuclear energy. Encourage Non NPT states to actively participate in multilateral forums and initiatives aimed at strengthening global non-proliferation regimes.
- **Enhance NPT Relevance and Adaptability:** Explore ways to make the NPT more relevant and adaptable to evolving geopolitical realities and emerging nuclear challenges. This could involve periodic reviews of the treaty to assess its effectiveness, address emerging issues, and ensure its continued relevance in the future.
- **Engage with Non NPT States:** Actively engage with Non NPT states to promote a deeper understanding of the treaty's objectives and benefits. This could include capacity-building initiatives, technical assistance programs, and diplomatic efforts to encourage Non NPT states to consider joining the treaty or adopting non-proliferation commitments consistent with NPT principles.
- **Foster International Cooperation:** Encourage international cooperation and collaboration on nuclear energy, technology transfer, and peaceful uses of nuclear energy. This can help address the energy needs of Non NPT states and reduce the motivation for pursuing nuclear weapons programs.
- **Strengthen Regional Security Mechanisms:** Promote the development and strengthening of regional security mechanisms to address regional non-proliferation challenges and build confidence among states. This could involve supporting regional dialogue forums, confidence-building measures, and cooperative security initiatives.
- **Continuous Research and Analysis:** Support ongoing research and analysis on the implications of bilateral agreements, such as the Indo-US 123 Agreement, on the NPT and the broader non-proliferation regime.

## **Conclusion**

In a nutshell, the challenges and consequences of the US-initiated 123-Agreements in the development of nuclear and atomic commerce. The US approach of granting exemptions to non-signatory countries of the NPT via providing waivers under the pretext of 123-Agreements is in contradiction with the principles of the Non-Proliferation Treaty, which can cause concerns for nuclear and non-nuclear states. There are compelling reasons to favor or enhance reforms in the 123-Agreements to avoid or minimize non-proliferation consequences and maximize benefits. It is questioned whether the US policy in South Asia is to aggressively resolve international problems to prevent significant governments from threatening US hegemony, offset China's expansion in Asia, and enhance India's stature in the region. The Indo-US nuclear cooperation deal provided the two countries' relations a boost, and they have been improving ever since. However, the article highlights concerns over India's past behavior, the impact of partisan proliferation matters, and India's commitment to cap its fissile material and not divert legally procured fuel to build up weapons for war. The article suggests that political and economic considerations weighed in more than anything else when the 123 agreement was signed, which may not be all that rosy for the future of our planet.

Furthermore, this US-initiated 123-Agreements for nuclear and atomic commerce, which range from constructive to destructive outcomes. The US approach of granting exemption to countries that are not signatories to the NPT, through providing waivers in the pretext of 123-Agreement, is against the principal measures of the Non-Proliferation Treaty. The Hyde amendment, which allows nuclear cooperation with India, has also been criticized for undermining international counter-proliferation efforts. The author argues that the application of these protocols should not stir up divide among countries and render the whole process distrusted and thrown into disrepute. The purpose of the US policy in South Asia is to prevent significant governments from threatening US hegemony, and the nuclear accord with India is one of the best moves in that regard to offset China's expansion in Asia. However, it may compromise the future of the planet due to issues such as India's history of betraying non-proliferation efforts and concerns about the country diverting its legally procured fuel to building up weapons for war. The text suggests that negotiating reforms rather than unilaterally imposing them would be better for maximizing non-proliferation benefits while minimizing non-proliferation consequences.

## Bibliography

### Books

Black-Branch, Jonathan L., and Dieter Fleck. *Nuclear Non-Proliferation in International Law: Volume II - Verification and Compliance*. Basingstoke: Springer, 2015.

Black-Branch, Jonathan L., and Dieter Fleck. *Nuclear Non-Proliferation in International Law - Volume VI: Nuclear Disarmament and Security at Risk – Legal Challenges in a Shifting Nuclear World*. Basingstoke: Springer Nature, 2021.

Bukhari, Syed S. *Pakistan's Security and the India-US Strategic Partnership: Nuclear Politics and Security Competition*, 1st ed. London: Routledge, 2020.

Campion, Charles. *20/20 Visions: Collaborative Planning and Placemaking*. London: Routledge, 2019.

Chari, P. R. *Indo-US Nuclear Deal: A Case Study in Indo-US Relations*, 1st ed. London: Routledge, 2009.

Chari, P. R., editor. *Indo-US Nuclear Deal: Seeking Synergy in Bilateralism*. London: Routledge, 2014.

Frieman, Wendy. *China, Arms Control, and Nonproliferation*, 1st ed. London: Psychology Press, 2004.

Gibbons, Rebecca D. *The Hegemon's Tool Kit: US Leadership and the Politics of the Nuclear Nonproliferation Regime*. Ithaca: Cornell University Press, 2022.

Kaufman, Scott. *Introduction: Promoting the Peaceful Atom*. Ithaca: Cornell University Press, 2012.

Larkin, Bruce D. *Designing Denuclearization: An Interpretive Encyclopedia*, 1st ed. New York: Routledge, 2008.

McGoldrick, Fred, Robert J. Einhorn, Duyeon Kim, and James L. Tyson. *ROK-USA Civil Nuclear and Nonproliferation Collaboration in Third Countries*. Arms Control and Non-Proliferation Initiative Brookings, 2015.

Mistry, Dinshaw. *The US–India Nuclear Agreement*. Cambridge: Cambridge University Press, 2014.

Ramachandran, R. "Indo-US Nuclear Agreement and IAEA Safeguards." *Strategic Analysis* 29, no. 4 (2005), 574-592. doi:10.1080/09700161.2005.12049830.

Scheinman, Lawrence. *The International Atomic Energy Agency and World Nuclear Order*, 1st ed. London: Routledge, 2016.

Scheinman, Lawrence. *The International Atomic Energy Agency and World Nuclear Order*, 1st ed. Washington D.C.: Routledge, 1987.

### **Research Papers and Journals**

Abbasi Rizwan ,Ullah Sufian,'Rising Strategic Instability and Declining Prospects for Nuclear Disarmament in South Asia – A Pakistani Perspective', *Asian Journal of Peacebuilding* February 7, 2022.

Bagchi, Indrani. "India sees red as China voices n-deal concerns." *The Times of India* (New Dehli), September 2, 2008. <https://timesofindia.indiatimes.com/india/india-sees-red-as-china-voices-n-deal-concerns/articleshow/3433914.cms>.

Bano, Saira. "The India–US Nuclear Deal: Norms of Power and the Power of Norms." *The Social Construction of State Power*, 2020, 101-122. doi:10.1332/policypress/9781529209839.003.0005.

Braun, Chaim, and Christopher F. Chyba. "Proliferation Rings: New Challenges to the Nonproliferation Regime." *International Security* 29, no. 2 (fall 2004) (n.d.): 5–49.

- Bhure, Rashmi. "Post India – US nuclear deal: Need for restructuring the nonproliferation regime." *Nuclear Disarmament: Regional Perspectives on Progress*, 2013, 51-61. doi:10.1108/s1572-8323(2013)0000021010.
- BLIX, HANS. "US Holds Key to Non-Proliferation." *New Perspectives Quarterly* 24, no. 1 (2007), 27-30. doi:10.1111/j.1540-5842.2007.00862.
- Carter, Ashton B. "America's New Strategic Partner?" *Foreign Affairs* 85, no. 4 (2006), 33. doi:10.2307/20032039.
- Cambridge University Press. "United States and South Korea Sign Major Free Trade Agreement; Prospects Uncertain." *American Journal of International Law* 101, no. 4 (2007), 881-882. doi:10.1017/s0002930000757149.
- Cambridge University Press. "China-United States: Agreement for Cooperation Concerning Peaceful uses of Nuclear Energy." *International Legal Materials* 24, no. 5 (1985), 1393-1407. doi:10.1017/s0020782900030102.
- Coppen, Tom. "The Law of Arms Control and the International Non-proliferation Regime." *Brill* 29 (January 2017), 225-331. doi:10.1163/9789004333352.
- Carlson John, ' Is the NPT still relevant? – How to progress the NPT's disarmament provisions', *Journal for Peace and Nuclear Disarmament*, 2(1), 97–113, 2019.
- Dunn A Lewis, ' The NPT Assessing the Past, Building the Future', *Monterey Institute of International Studies, James Martin Center for Nonproliferation Studies. Nonproliferation Review, Vol. 16, No. 2, July 2009.*
- Emmers, Ralf. Review of *Review of Regional Security Structures in Asia*, by Ashok Kapur. *Contemporary Southeast Asia* 25, no. 3 (2003): 508–11.
- "Fissions in the nuclear order: the India–US Nuclear Deal and the nuclear-governance regime." *Strategically Created Treaty Conflicts and the Politics of International Law*, 2014, 282-354. doi:10.1017/cbo9781107338005.011.

- Ghoshroy, Subrata. "The Indo-US Nuclear Deal: Triumph of Strategic and Business Interests over Non-Proliferation." *South Asia at a Crossroads*, 2010, 264-280. doi:10.5771/9783845223117-264.
- Hibbs Mark, 'Eyes on the prize: India's pursuit of membership in the Nuclear Suppliers Group', *The Nonproliferation Review*, Volume 24, Issue 3-4, 2017
- Hirsch, Theodore. "The IAEA additional protocol: What it is and why it matters." *The Nonproliferation Review* 11, no. 3 (2004), 140-166. doi:10.1080/10736700408436983.
- Hyder, Tariq Osman. "Indo-US Nuclear Deal and Pakistan The Years Ahead." *Policy Perspectives* 10, no. 2 (2013): 91–104.
- Ikonomou, Pantelis F. "Non-NPT Nuclear Weapon States." *Global Nuclear Developments*, 2020, 123-142. doi:10.1007/978-3-030-46997-9\_8.
- "Implications of the Indo-US Nuclear Deal for India's Energy and Military Programs: R. Rajaraman." *Indo-US Nuclear Deal*, 2013, 133-152. doi:10.4324/9780203378533-14.
- "India–US civilian nuclear energy cooperation." *India–US Relations in the Age of Uncertainty*, 2016, 54-80. doi:10.4324/9781315588339-3.
- Johnson Rebecca, "Rethinking the NPT's Role in Security: 2010 and Beyond." *International Affairs (Royal Institute of International Affairs 1944-)* 86, no. 2 (2010).
- Kutchesfahani, Sara Z. "The Nuclear Non-Proliferation Treaty's Contribution to Global Nuclear Order." *Global Nuclear Order*, 2018, 62-95. doi:10.4324/9781315277530-4.
- Lee Manseok, Nacht Michael, 'Challenges to the Nuclear Non-Proliferation Treaty', *Strategic Studies Quarterly*, Fall, 2020.
- Maslekar, Rahul A. "India's Military Diplomacy." *Defence Diplomacy and National Security Strategy: Views from the Global South*, 2020, 207-220. doi:10.18820/9781928480556/11.

- Mehrotra, O. N. "Imminence of Indo-Pak Arms Race." *Strategic Analysis* 3, no. 11 (November 2012), 401-404. doi:10.1080/09700168009425406.
- Meier, Oliver. "The Indo-US Nuclear Deal: The End of Universal Non-Proliferation Efforts?," n.d.
- Mistry, Dinshaw, and Sumit Ganguly. "The Indo-US Nuclear Pact: A Good Deal." *Current History* 105, no. 694 (November 1, 2006): 375–78. <https://doi.org/10.1525/curh.2006.105.694.375>.
- "Negotiating the Section 123 Agreement." *The US–India Nuclear Agreement*, 2014, 129-150. doi:10.1017/cbo9781139683487.007.
- Perry, Floyd L. "The Future of USA - India Relations." 1991. doi:10.21236/ada236886.
- Osman Tariq, 'Indo-US Nuclear Deal and Pakistan the Years Ahead', *Policy Perspectives Vol. 10, No. 2 (2013)*.
- Perkovich, George. "Faulty Promises: The USA-India Nuclear Deal." Carnegie Endowment for International Peace. Accessed March 9, 2023. <https://carnegieendowment.org/2005/09/07/faulty-promises-USA-india-nuclear-deal-pub-17419>.
- Rizwana Abbasi. "Nuclear Energy Security: Emerging Trends and Pakistan." *Policy Perspectives: The Journal of the Institute of Policy Studies* 13, no. 2 (2016). doi:10.13169/polipers.13.2.0167.
- "The Process of Negotiation of the Nuclear Deal/123 Agreement (India): Reshmi Kazi." *Indo-US Nuclear Deal*, 2013, 86-108. doi:10.4324/9780203378533-12.
- "The Indo-US Nuclear Deal in the Context of Indian Foreign Policy: Lalit Mansingh." *Indo-US Nuclear Deal*, 2013, 181-198. doi:10.4324/9780203378533-17

- Thompson, Sam. "The NPT Regime, Present and Future Global Security: An American View." *Nuclear non-Proliferation and Global Security*, 2020, 151-164. doi:10.4324/9781003056867-14.
- Tongia, Rahul. "The political economy of Indian power sector reforms." *The Political Economy of Power Sector Reform*, 2007, 109-174. doi:10.1017/cbo9780511493287.005.
- Jensen, Lloyd. "Discussions and Reviews: The peaceful atom: a review." *Journal of Conflict Resolution* 9, no. 1 (1965), 147-151. doi:10.1177/002200276500900112.
- Perkovich, George. "Global implications of the USA-India deal." *Daedalus* 139, no. 1 (2010), 20-31. doi:10.1162/daed.2010.139.1.20.
- Saha, Aniruddha. "Nuclear Stigma and Deviance in Global Governance: A New Research Agenda." *International Studies Quarterly* 66, no. 3 (2022). doi:10.1093/isq/sqac055.
- Saksena, Jyotika. "Regime Design Matters: The CTBT and India's Nuclear Dilemma." *Comparative Strategy* 25, no. 3 (2006), 209-229. doi:10.1080/01495930600956237.
- Santhanam, Krishnamurthy. "An Analysis of the Indo-US Civil Nuclear Cooperation Agreement." *South Asia at a Crossroads*, 2010, 257-264. doi:10.5771/9783845223117-257.
- Sharei, Mahmoud. "The Treaty on Non Proliferation of Nuclear Weapons (NPT) Regime, and the Legality of Nuclear Weapons in International Law: Is There the 'Good Faith' in a Legal Regime for Nuclear Disarmament?" *SSRN Electronic Journal*, August 2010, 1-88. doi:10.2139/ssrn.2742475.
- Tannenwald, Nina. "Justice and Fairness in the Nuclear Nonproliferation Regime." *Ethics and International Affairs* 27, no. 3 (2013), 299-317. doi:10.1017/s0892679413000221.



## Newspaper

Abbasi Rizwana, ' **Why the NPT needs a makeover** ', *Dwan News Paper*, June 14, 2015.

BAGCHI, INDRANI. "India sees red as China voices n-deal concerns." *The Times of India* (New Dehli), September 2, 2008.  
<https://timesofindia.indiatimes.com/india/india-sees-red-as-china-voices-n-deal-concerns/articleshow/3433914.cms>.

Bano, Saira. "Pakistan: Lessons from the India-US Nuclear Deal." *The Diplomat* (Washington D.C.), June 22, 2015.  
<https://thediplomat.com/2015/06/pakistan-lessons-from-the-india-us-nuclear-deal/>.

Etzioni Amitai, 'The Darker Side of the USA-India Nuclear Deal', *The Diplomat*, February 13, 2015. <https://thediplomat.com/2015/02/the-darker-side-of-the-u-s-india-nuclear-deal/>

Sengupta, Somini. "Interests Drive USA to Back a Nuclear India." *The New York Times* (New Dehli), December 10, 2006.  
<https://www.nytimes.com/2006/12/10/world/asia/10india.html>.

Staff, Reuters. "TIMELINE: Twists and turns in the India-USA nuclear deal." *Reuters*, October 2, 2008.

Swanson, Ana. "USA Courts India as Technology Partner to Counter China." *The New York Times*, January 31, 2023.

## Websites

Arms Control Association. "The USA Atomic Energy Act Section 123 At a Glance." Arms Control Association | The Authoritative Source on Arms Control Since 1971. Last modified April 2019. <https://www.armscontrol.org/factsheets/AEASection123>.

"Comprehensive Nuclear-Test-Ban Treaty (CTBT) – UNODA." Welcome to the United Nations. Accessed March 1, 2023. <https://www.un.org/disarmament/wmd/nuclear/ctbt/>.

Hibbs Mark, "Towards Nuclear supplier group Policy for States Not Party to the NPT", Carnegie Endowment for International Peace, 2016.

"IAEA Clears Indo-US Nuclear Deal." The National. Last modified August 2, 2008. <https://www.thenationalnews.com/world/asia/iaea-clears-Indo-US-nuclear-deal-1.523245>.

Lavoy, Peter R. "The Enduring Effects of Atoms for Peace." Arms Control Association | The Authoritative Source on Arms Control Since 1971. Last modified May 19, 2021. [https://www.armscontrol.org/act/2003\\_12/Lavoy](https://www.armscontrol.org/act/2003_12/Lavoy).

Munro, A "Nuclear proliferation." Encyclopedia Britannica, November 22, 2018. <https://www.britannica.com/topic/nuclear-proliferation>.

Kimball, Daryl G. "Pakistan Presses Case for USA Nuclear Deal." Arms Control Association | The Authoritative Source on Arms Control Since 1971. Accessed December 12, 2022. <https://www.armscontrol.org/act/2010-03/pakistan-presses-case-us-nuclear-deal>.

NTI. "New Agenda Coalition." NTI. Last modified 2022. <https://www.nti.org/education-center/treaties-and-regimes/new-agenda-coalition/>.

OECD|Nuclear Energy Agency. "Section 123 of USA Atomic Energy Act." OECD ILibrary. Last modified July 8, 2008. [https://www.oecd-ilibrary.org/nuclear-energy/section-123-of-u-s-atomic-energy-act\\_nuclear\\_law-2008-5k9gw7rz1cs7](https://www.oecd-ilibrary.org/nuclear-energy/section-123-of-u-s-atomic-energy-act_nuclear_law-2008-5k9gw7rz1cs7).

Reaching Critical Will. "Indo-US nuclear deal." Reaching Critical Will. Last modified 2022. <https://www.reachingcriticalwill.org/resources/fact-sheets/critical-issues/5451-Indo-US-nuclear-deal>.

Squassoni, Sharon. "The USA-Indian Deal and Its Impact." Arms Control Association | The Authoritative Source on Arms Control Since 1971. Accessed December 21, 2022. <https://www.armscontrol.org/act/2010-07/Indo-USn-deal-its-impact>.

"USA-Republic of Korea (R.O.K.) Agreement for Peaceful Nuclear Cooperation." United States Department of State. Last modified January 15, 2021. <https://www.state.gov/remarks-and-releases-bureau-of-international-security-and-nonproliferation/u-s-republic-of-korea-r-o-k-agreement-for-peaceful-nuclear-cooperation>.