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India and the World Nuclear Order: India's bid at the NSG

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ABSTRACT:

In 1974, India conducted its inaugural nuclear test, codenamed 'Smiling Buddha'. However, this event was met with scepticism and was not widely embraced. The Nuclear Suppliers Group was established to restrict the sale of nuclear fission materials, such as uranium, to nations like India that were not signatories of the Non-Proliferation Treaty. However, it was not until 1998 that India officially acquired nuclear weapons and so gained nuclear capability. The tests were met with pessimism and penalties from nations that are members of the NSG, with the United States being particularly critical. However, the impact of this was nullified by the Indo-US nuclear deal of 2008, which is widely seen as the pivotal moment for India's nuclear programme.

Through this agreement, India gained formal recognition as a non-NPT member with a nuclear programme that is equivalent to the standards set by the International Atomic Energy Agency (IAEA). It was granted an exemption from the standards established by the NSG in 1992. India has consistently advocated for a more positive attitude from the permanent signatories of the treaty and the members of the NSG in order to obtain NSG membership. This membership would enable India to expand its imports and exports of nuclear energy, which it intends to use exclusively for peaceful purposes.

The NSG waiver has been suspended since the Bush administration. India emphasises the need of a clean environment and energy, as well as the significant market potential, as prerequisites for its request to join the NSG. This would significantly influence the global nuclear order and shape the future of a rapidly evolving nuclear landscape.

The paper will look into India's present position in the nuclear world and its aim to be inducted in the NSG.

Keywords: India, Nuclear Deterrence, NSG, World Nuclear Order, India US Nuclear deal

INTRODUCTION:

India has long advocated peace and non-violence, found itself compelled to develop nuclear weapons for defense purposes due to the realities of global power dynamics. India's journey in the realm of nuclear technology is a testament to its scientific prowess and strategic foresight. The nation's inaugural nuclear test, codenamed 'Smiling Buddha', in 1974 marked the beginning of a complex and multifaceted nuclear narrative (Perkovich,1999).

Despite initial skepticism and international isolation, India's commitment to developing a robust nuclear program has been unwavering (Tellis,2001). The establishment of the Nuclear Suppliers Group (NSG) aimed to regulate the sale of nuclear materials, yet it was not until 1998 that India officially acquired nuclear weapons, thereby gaining significant international attention (Kampani, 2001).

The Indo-US nuclear deal of 2008 was a pivotal moment, granting India formal recognition as a non-NPT member with a nuclear program equivalent to IAEA standards (Sarin & Singh, 2009). This agreement not only altered India's international standing but also set the stage for its aspirations to join the NSG (Squassoni, 2006). India's bid for NSG membership is driven by its desire to expand its nuclear trade and utilize nuclear energy for peaceful purposes (Mian & Nayyar, 2008). The country's current position in the global nuclear landscape and its pursuit of NSG membership are critical factors that will shape the future of international nuclear policy and cooperation (Nayyar, 2010).

India's nuclear ambitions are not merely driven by strategic considerations but also by its growing energy needs. With a rapidly expanding economy and a burgeoning population, the demand for energy in India is soaring. Nuclear energy offers a viable solution to bridge the energy deficit and reduce reliance on fossil fuels, thereby contributing to global efforts in mitigating climate change (Kumar, 2011). Furthermore, India's advancements in nuclear technology have the potential to foster technological innovations and economic growth within the country. As India continues to navigate the complex dynamics of international nuclear politics, its role as a responsible nuclear state is crucial for regional stability and global security (Sagan, 2012).

The civil nuclear agreement between USA and India in 2008 was welcomed with huge optimism and support in India and among its allies considering the magnitude of the deal. This was possible through India's vigorous efforts post its first nuclear test in 1974 at Pokhran which saw a huge backlash

from the international community (Basrur, R. 2017). The tests not only were met with furious statements from various countries but also included sanctions which took a toll on India and its already struggling economy back then. The nuclear tests also added a huge limitation which was the membership of NSG (Nuclear Suppliers Group) formed in 1974 by seven countries, already signatories of the NPT treaty that India isn't a part of. President Barack Obama of the United States of America announced during a state visit to India in November 2010 that the United States would support India's entry into the Missile Technology Control Regime, the Australia Group, the NSG, and Wassenaar Arrangement "in a phased manner" and would promote the evolution of policy participation criteria to that end "consistent with maintaining the core principles of these regimes." India has formally committed to upholding its voluntary moratorium on nuclear weapon testing and to not sharing sensitive nuclear technology or material with third parties.

The Nuclear Suppliers Group (NSG) is an international organisation made up of nuclear supplier nations with the goal of limiting the export of technology and materials used in the production of nuclear weapons in order to prevent them from spreading. It aims to strengthen the current nuclear material safety measures. Following India's May 1974 nuclear tests, which demonstrated that certain nuclear technologies intended for non-weapons applications may also be exploited to produce weapons of mass destruction, the NSG was established. The inaugural meeting of the group took place in November 1975. Agreements on export regulations were reached during a series of talks in London (Nayan, R, 2018)

India is not a member of NSG and has been long pushing for a membership considering India's future energy prospects and goals. The membership was however, given a boost through the India US Nuclear deal[i]in which India complied with the IAEA (International Atomic Energy Agency) guidelines and thus gained a waiver which lifted much of import export sanctions levied upon India post its nuclear tests. The Waiver proved to be of utmost importance in furthering the advancement of nuclear technology considering the fact that it helped India in acquiring material necessary for the enrichment of nuclear power particularly the acquisition of two most important elements in the form of Uranium and Plutonium. This however did not put India in a very controlling position as it still is left out of various nuclear energy advanced technology specifically restricted for NSG members. This means that India is still left out of significant information related to nuclear energy and other relevant information. Furthermore, in the recent years India's push for clean renewable energy and shunning the traditional methods also could take a hit pertaining to the restrictions imposed. The import and export of nuclear enriching minerals is the first step primarily needed to achieve such goals. India's INDC relating to the Paris Climate agreement wherein it was pledged to shun off Fossil related energy and in turn moving to clean and renewable energy (Almost 40%) of total energy[ii] also will take a hit if India's membership at the NSG is delayed.

WHY INDIA NEEDS TO JOIN NSG?

India is keen on joining the Nuclear Suppliers Group (NSG) and play a more important and positive role in the sphere of nuclear non-proliferation. New Delhi is looking to upgrade its status and have a greater say in the group's mandatory scope. It is hoping to remove the impediments in the way of its accession. India's membership of the NSG has been a central concern over the past few months and has become a critical foreign policy issue for the Narendra Modi government (Gaur, 2018). The prime reasons that form the bases for Why India needs to join the NSG are listed as below:

1. India's access to cutting-edge technology from the other members of the Group will virtually expand with membership in the NSG.

2. Making nuclear equipment and having access to technologies will help the Make in India initiative. Our nation's economy will grow as a result of that.

3. According to India's Intended Nationally Determined Contribution under the Paris Climate Agreement, it has committed to lower reliance on fossil fuels and ensure that 45% of India's energy comes from clean, renewable sources. India needs to increase nuclear power generation in order to meet this goal. Only if India is granted access to the NSG can this take place.

4. By giving India access to nuclear technology and supplies from abroad, it will lessen the risk that foreign nuclear firms confront when doing business with India.

5. Increased sales of these nuclear components will allow India to produce stronger nuclear breeders and export them to less developed nations, contributing to the nation's economic prosperity.

6. The production of nuclear electricity would rise if India joined the NSG, which would also benefit the Make in India initiative

India has started to see the benefits of trade restrictions and non-proliferation in recent years. This occurred as a result of India's strategic horizons expanding to take into account Pakistan's nuclear capability and willingness to allow its strategic nuclear assets to spread, the threat posed by terrorists seeking to possess Weapons of Mass Destruction, a more intense rivalry with China, and closer ties with the West ("The Persistent Threat of Nuclear Crises Among China, India and Pakistan,")· But India has not explicitly given a thorough justification for why it wants to join the NSG, so it is unclear how far it has departed from accepted perspectives' thorium program and to make enormous domestic profits. India actually has two separate types of justifications. One results from India's increasing ambitions for its nuclear-powered civilian program (Bano, 2014).The other is a result of India's pursuit of a more prominent position internationally, including nuclear status. Some Indians acknowledge that prestige plays a role in Indian thinking about the NSG, but as long as India is unwilling to publicly link the possession of sensitive nuclear technology (SNT) and nuclear weapons with international power and status, India will instead highlight more constrained, materialistic, and practical reasons for India's interest in joining the NSG (Hibbs, 2018). In the end, the perceived international standing that this action would confer upon a more ambitious India may be the most significant justification for India's quest for NSG membership. An advanced level of strategic technical development, the ability to deliver controlled goods, the attainment of the governance capacity to manage intricate trade controls, and the status as a global rule-maker on strategic technology are all indicators of membership in the NSG. In addition, India wants a permanent place on the NSG, which includes all P5 governments, on the UN Security Council (Insights on India,

2022). Although Indian diplomats have not explicitly emphasized the P5-NSG connection, supplier states in the group have geostrategic reasons to consider India joining the NSG.

CIVIL NUCLEAR COOPERATION

Furthermore, the Indian government has aggressively sought civil nuclear collaboration with partner countries by using the exemption provided by the NSG in 2008, while also working to gain political support for its integration with the regime. This include the execution of cooperative agreements involving the provision of nuclear materials and technologies. They are listed as below in their descending order:

1. Agreement for cooperation in the peaceful uses of nuclear energy between the governments of Bangladesh and India (08-April-2017)

2. Cooperation in the peaceful application of nuclear energy between the governments of the Socialist Republic of Vietnam and India 09-December-2016 (Chaudhury, 2017)

3. Use of nuclear energy between the governments of Japan and India on 11 November 2016 (Munjad,2023)

4. An accord of nuclear energy between the governments of the United Kingdom and India 2015

5. Consensus on the usage of nuclear energy between the governments of Sri Lanka and India.

6. The governments of Australia and India have agreed to work together on the peaceful uses of nuclear energy (05- Sep-2014).

The agreement that was signed with Japan was the most important of these contracts. This is due to the fact that some important parts of western nuclear reactors are manufactured in Japan. After facing bankruptcy in 2017 and other difficulties, such as those relating to India's liability law, US-based Westinghouse has revealed plans to build six nuclear reactors in the Indian state of Andhra Pradesh thanks to the agreement with Japan. India and worldwide nuclear suppliers are breaking the impasse caused by India's liability law, according to the declaration from March 2019 (Munjal, 2023).

INDIA'S QUEST FOR A MORE CLEAN AND RENEWABLE ENERGY

The inconsistency of the energy sector's reform and India's reliance on imported energy sources make it difficult to meet expanding demand. According to the 2019 edition of BP's Energy Outlook, between 2017 and 2040, India's energy consumption was expected to increase by 156%. The country's energy balance is expected to change gradually through the year 2040, with fossil fuels accounting for 79% of demand, down from 92% in 2017. In actuality, there will be a 120% rise in primary energy demand from fossil fuels between 2017 and 2040. Although India was on track to reach 100% household electricity connection early in 2019, there is a pressing need for more dependable power supplies. In July 2021, the Power System Operation Corporation reported that the peak demand was 201 GW. The government's 12th five-year plan, which covered the years 2012 to 2017, set a $247 billion goal for the addition of 94 GWe. The plan intended for a total installed capacity of 700 GWe by 2032, including 63 GWe of nuclear, to support economic growth of 7-9%. India would require about $1.6 trillion in investments in power generation, transmission, and distribution by 2035, according to the International Energy Agency of the OECD. The government predicted that nuclear capacity would fall far short of its 63 GWe target and that by the year 2031c, the overall nuclear capacity would likely be around 22.5 GWe. The nation's atomic energy minister reiterated this amended goal in December 2021 (Mistry, D, 2006).

Economic expansion and the reduction of poverty are India's top priorities. Because of how important coal is, reducing CO2 emissions is not a top priority, and the government declined to declare goals before the 2015 Paris Climate Conference, the 21st Conference of the Parties on Climate Change. In September 2014, the environment minister said that it would be 30 years before India's CO2 emissions were expected to decline (Paddock C, 2009). A revised long-term low-carbon development strategy was released by India's Ministry of Environment, Forests, and Climate Change in November 2022. This policy includes goals to triple nuclear power capacity by 2032.

India US Civil Nuclear Deal

India's status in the international nuclear arena saw a substantial shift with the 2005 signing of the Indo-US Nuclear Deal (Bano, S, 2015). Despite not being a party to the Nuclear Non-Proliferation Treaty (NPT), it acknowledged India as a responsible nuclear state and granted it access to civil nuclear technology and fuel (Yeon-jung, J, 2017). This change in status paved the way for India's later attempts to join global nuclear control organisations like the NSG.

The three main objectives of the Indo-US civil nuclear collaboration were to enhance counter-proliferation cooperation, boost economic cooperation based on India's economic growth, and fortify a strategic partnership fuelled by China's ascension (Robertson & Carlson, 2016). Keeping these geopolitical factors in mind, the Bush administration made a bold decision to significantly alter the US non-proliferation approach. The US Atomic Energy Act of 1954, which sets standards for nuclear trade with other countries and is based on the full-scope safeguards of the IAEA, needed to be changed in order to comply with the agreement (Boese, W, 2008).

After a contentious debate in Washington, DC, President George W. Bush secured a waiver power from Congress to initiate civil nuclear cooperation with India under three conditions: the signing of the IAEA safeguards agreement specifically for India, agreement by the NSG's participating nations

(PG), and documentation of the US commitment to the NPT framework (Kessler & Mathews, 2008). The Manmohan Singh government in India encountered strong political resistance to the agreement, and in order to comply with the requirement to keep military and civilian nuclear reactors separate, it had to pass a vote of confidence in Parliament (Rauch & Frankfurt, 2009). With cooperation from the US and most other NSG members, India won a "clean and unconditional waiver" from the NSG in place of the Separation Plan and IAEA safeguards (Rajagopalan, R, 2022).

The member nations became divided into three sections over the issue of an NSG waiver that applied only to India. India's waiver was enthusiastically backed by the first group, which includes significant nuclear exporters like France, Russia, and the United Kingdom. Germany, Japan, and Canada made up the second group, which was in favour of India's admission in the international non-proliferation framework but required more persuasion. The final panel sought to uphold the non-proliferation principle and was very reluctant to grant the waiver. The nations represented were Austria, China, Ireland, New Zealand, and Switzerland (Basrur, R, 2017).

The final group of questioners addressed general concerns about how the India-specific waiver would affect the nuclear non-proliferation framework. This naturally led to basic and technical queries about how the NPT regime would hold up in light of India's admission. The main demands made during the waiver discussion were that India have a legally binding moratorium on nuclear tests, that it set up a separate monitoring system to ensure that it is being vigilant about its commitment, and that it include a clause restating the NSG's strong support for the NPT.

New Delhi obtained resounding backing from Russia, France, and especially the US even as the third group opposed the amnesty that applied specifically to India. A unanimous agreement was eventually reached for an India-specific NSG waiver as a result of the considerable pressure this put on the recalcitrant nations (Lalwani & Mason, 2016).

India consented to a Separation Plan that placed IAEA safeguards on all future and 14 of its current nuclear power reactors. India also consented to replace the fuel core of French origin in the APSARA reactor and to shut down the CIRUS research reactor by 2010 (IAEA 2005). Nevertheless, the debate over India's Separation Plan and its fast breeder reactor programme persisted (Paracha & Leah, 2016). The scientific community in India has strenuously objected to any recommendations to subject the fast breeder reactor programme to IAEA oversight.

In 2008, India was eventually granted an NSG waiver. The NSG Trigger List goods with nuclear or dual-use capabilities might now all be traded in by New Delhi. India was given a clear but not complete waiver. In addition, before engaging in any nuclear trade, NSG members will take into account India's non-proliferation pledge. Initially, India was not permitted access to ENR technology. The resultant NSG waiver gave India a special status and went into effect right away. India is the only nuclear-armed country outside of the NPT with authorization for both a military and a civilian nuclear programme (Qutab, 2016)

INDIA AND THE WORLD NUCLEAR ORDER IN THE MODI LED GOVERNMENT POST 2014

The first term of Prime Minister Narendra Modi (2014–2019) saw a steady strengthening of India’s links to the global nuclear order (Malik, 2018). The nuclear supplier group (NSG) membership drive by the Modi government has hit a roadblock, mostly due to China's firm stance (Sethi, 2020). As a result of productive collaboration with other key actors in the order, the political consensus supporting India's entry into the system, following discussions, and the execution of nuclear supply and exchange agreements, have all been successful (Purohit, 2019). Considering the incredible shift in India's involvement in the global nuclear order over the last two decades, these alterations from 2014 to 2019 are only the tip of the iceberg (Sharma, 2017). No one Indian administration was responsible for India's accession to the nuclear alliance; rather, it was a conglomeration of external geopolitical and geoeconomics forces, including the Cold War's demise, a revisionist China's ascent, and India's economic liberalisation and subsequent meteoric rise, which generated a substantial market (Mehta, 2016). Problems with suppliers' responsibility under India's 2010 Civil Liability for Nuclear Damage Act limited the practical effect of these agreements (Srinivasan, 2018). At the same time, India's government started talking to the US about joining the NSG, which would be a big step for the country in terms of its links to the international nuclear system (Choudhury & Rao, 2019). India has been actively pursuing its goal of joining the NSG since 2014, rather than taking a passive role in the international nuclear system (Ganguly & Ramakrishnan, 2019). Prime Minister Modi had a slew of international meetings with influential members of the order in an effort to win their political support for India's accession (Thakur, 2019).

This marked a new beginning in India’s bid to make a place in the NSG, considering the fact that through all these years and especially post-2014, there has been a very active role played mostly by various governments in India in the form of agreements with various governments or diplomatic missions towards the goal of getting a permanent place in NSG considering the growth of India as a power to reckon both economically and politically in International Politics (Raghavan & Chatterjee, 2020).

INDIA, CHINA AND PAKISTAN? GEOPOLITICS SURROUNDING INDIA’S BID?

The final topic of discussion revolves around geopolitics and grand strategy. Some claim that the US supported India's waiver from the NSG in order to advance its strategic ties with India (Pant, 2010). Washington was probably influenced by further issues as well, such as the potential for nuclear trade with Delhi. However, as part of President Obama's move to Asia, the waiver was unquestionably one of the actions that led to a revitalization of US relations with India (Tellis, 2009). Similar arguments might be made regarding China's relations with Pakistan and Beijing's choice to interpret the grandfathering clause related to its sale of reactors to Islamabad broadly in order to permit the construction of new reactors (Kapur, 2017).

However, China's nuclear cooperation with Pakistan precedes current events and is not a direct reaction to the nuclear cooperation pact between India and the US (Fravel, 2010). In fact, with Pakistan and India applying for membership in recent years, geopolitical issues may have grown more pressing.

The US has aggressively backed India's initiatives (Pant, 2010). It's possible that Delhi officials felt China was acting against their strategic interests when it withheld approval of India's application. There is no evidence to back up the claim that the US wanted this when it initially encouraged India to qualify for NSG membership, but a skeptics might make it.

China has been the main source of opposition to India's admission to the club, however nations like New Zealand, Austria, and Turkey have not yet expressed their support (Kapur, 2017). The Indian government has invested a lot of diplomatic resources in trying to persuade China to join in during the last five years, but to no success (Pant, 2016). China's opposition to India's NSG membership was not unique, but it did complicate matters when combined with Pakistan's quest for NSG membership (Kapur, 2017). Pakistan specifically demanded that the membership procedure be devoid of discrimination and that all non-NPT membership applications be reviewed simultaneously, or all or nothing (Kapur, 2017). "There was an understanding by all participants of the need to ensure that supplier cooperation is not contributing directly or indirectly to nuclear proliferation, as well as the need to ensure that commercial rivalry does not jeopardise their mutually shared non-proliferation" (Kapur, 2017), Pakistan claimed of the Indo-US deal.

CONCLUSION

The inclusion of India in the NSG may not seem to significantly enhance India's nuclear ambitions, considering the 2008 exemption granted for nuclear cooperation between India and the US, as well as subsequent agreements with other countries for the exchange and advancement of nuclear energy. Nevertheless, considering that the Indian government has already invested a substantial amount of political influence in the matter of NSG membership, obtaining membership would be advantageous in bolstering India's standing as a prominent nuclear state. India's participation in the norm-making process of international nuclear fuel and technology control regimes would be incentivized.

India to its credit does have the luxury of having cordial relations with countries that are a part of NSG including USA, France and Russia to name a few. However, it needs to keep an eye on any misadventures that India is and has been facing from rivals in its neighborhood and in particular from China. India has time to time proven itself to be a responsible nuclear power whose nuclear capability should do the world a lot good than harm, it remains to be seen as to how despite the obstacles and challenges India would elevate its position further and secure a permanent seat in the NSG despite not being a signatory to the Nuclear Non Proliferation Treaty 1978.

To its credit, the Narendra Modi-led NDA administration has been vociferous about the need for India to join the NSG despite China's interference and opposition. The Indian government needs to apply fresh pressure in its quest of joining the NSG, gaining membership would be advantageous in that it would give India a voice within the nuclear trade cartel. Additionally, since the current Modi administration has already used a significant amount of political capital in its quest of NSG membership, success would strengthen Indian diplomacy.

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