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India's Quest for Nuclear Suppliers Group (NSG)

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Abstract

The Nuclear Suppliers Group (NSG) is a group of countries formed in 1974 after India's first nuclear test. Main job of the group is to make sure that nuclear materials and technology are not misused, by controlling its trade. India, despite its non-NPT status, has been seeking its full membership since 2016. India's membership goals are to gain strategic legitimacy, access advanced nuclear technology, and strengthen its energy security. This paper examines India's quest for NSG membership and its engagements with the global nuclear order.

The analysis focuses on the challenges which are surrounding India's membership bid, such as the NSG's consensus-based decision making, persistent opposition from China and select European states, and the contentious issue of India's non-NPT status. The paper argues India's exemplary non-proliferation record and commitment towards peaceful use of nuclear energy should facilitate India's entry into the group. Additionally its voluntary adherence to IAEA safeguards are the few criteria which should be reconsidered for India's membership. Admitting India would confirm its responsible nuclear status and also increase the NSG's relevance in the changing geopolitical and energy environment.

The paper argues that India's integration with NSG, based on its non-proliferation credentials rather than treaty status, represents a mutually advantageous step for both the NSG and the global non-proliferation regime.

Introduction

The Nuclear Suppliers Group (NSG) is one of the four leading multi-lateral global nuclear export control regimes, apart from Missile Technology Control Regime (MTCR), Wassenaar Arrangement and Australia Group. It is an informal arrangement comprising of 48 nuclear supplying countries working towards nuclear non-proliferation by controlling nuclear and nuclear related trades on international level since 1974. The NSG has its own rules and principles. These rules include many of the responsibilities that countries normally follow under treaties like the NPT or Nuclear Weapon-Free Zone agreements. So even if a country has not signed those treaties, NSG still monitors the obligations when dealing with nuclear material. The group allows a country to trade only when they are satisfied that the transfer would not contribute to spread of nuclear weapons. The guidelines set by NSG are not legally binding on the participating government of NSG but they are voluntarily committed to apply them nationally for peaceful nuclear transfer.^{1 2}

Participating in NSG holds a considerable significance to any country for its strategic, economic, and diplomatic goals. India started its pursuit in the year 2016, to gain international recognition and legitimacy as a responsible nuclear state. Following India's application, Pakistan as well filled its proposal in 2016. India is ready to join the mainstream nuclear commerce with the support of majority of the group members' viz. US, Russia, France, U.K. etc. Given that the NSG's decisions are based on the principle of consensus voting, it is not enough that the majority of members are in support of India's membership. India's trouble mainly comes from Austria, Ireland, Netherlands, Switzerland and China, their core argument revolves around India's non-NPT status. The consensus was in favor for no debate on India's membership in NSG unless detailed strategy for non-NPT countries' involvement in the club is developed. Additionally, China argues that if India were to be considered for the membership, then the application of other non-NPT countries such as Pakistan should also be considered alongside. In 2008, the NSG and International Atomic Energy Association (IAEA) gave India a special approval because India has a better record in preventing the spread of nuclear weapons. Pakistan does not have the same good record. But China is still trying to give Pakistan the same kind of NSG membership benefits that India has received.^{3 4}

India acknowledges challenges associated for gaining the NSG membership, as few participating governments tries to push criteria that undermines India's national interests. To overcome such challenges India is engaging with the opposing countries to clarify their concerns about India's non-NPT status through events like the visits in 2015 by Prime Minister Narendra Modi's to Ireland, President Pranab Mukherjee to Sweden and Foreign Secretary Dr. S. Jaishankar to Switzerland. While countries like China and few other European nations continue to oppose, India pushes its efforts to convey that it upholds NPT principles despite not being a signatory.

History and Evolution

The discovery of neutron induced fission in uranium (fissile reaction) in early 1939 by two German Scientists - Otto Hahn and Fritz Strassmann, triggered fear in the international community that Germany could acquire atomic weapons if they got hold of large quantities of Uranium which the Belgium were mining in Congo, Africa. The announcement of this discovery was combined with later findings of Britain's MAUD committee and the Einstein-Szilard letter in the United States. It prompted both the nations to explore not only controlled fission but also the possibility of an uncontrolled, explosive chain reaction. Britain carried out its classified Tube Alloys project in 1941 which was a research and development program to progress towards nuclear weapons during the Second World War. United States launched the Manhattan project in 1942 which resulted in dropping of first atomic bombs on the cities of Japan. The massive destruction concluded the Second World War and its effects can be still witnessed till date. Since then the global movement for nuclear disarmament has striven to move the world towards a safer future.^{5 6}

Nearly three decades later, on May 18, 1974, India conducted its initial test explosion of nuclear device, code named “Smiling Buddha”, at the Pokhran test facility under the supervision of Prime Minister Indira Gandhi and Physicist Dr. Raja Ramanna. The test certainly helped but did not catapult India onto the global state as the Indians might have hoped. Instead, it resulted in ostracism, as it attracted international criticism and led to restrictions on India’s future nuclear programs. The direct reaction to Pokhran I was establishment of US led Nuclear Suppliers Group, in 1974, by major suppliers of nuclear equipment and technology, for legitimized nuclear powers, non-proliferation of nuclear weapons and to keep India out of the nuclear club. India’s test made the international community realize that the nuclear technologies and equipment acquired by any state could possibly be used to build nuclear weapons. Hence, the group identified list of materials, technologies, and relevant equipment which could be used to develop nuclear weapon and held the first meet in 1975 at London. Other few series of meeting held in London built their identity as the “London Club” before it became as the Nuclear Suppliers Group. The founding members of the group were - United States, USSR, United Kingdom, France, West Germany, Canada, and Japan.^{7 8}

The 1974 test was not enough for India to be on the same page as other nuclear states. The Indian leadership started working towards revival of Indian nuclear research. In 1995, the then Prime Minister of India P.V. Narshima Rao ordered another nuclear test. Unfortunately it had to be terminated after the CIA’s satellites picked up preparatory activity of test at Pokhran test facility which resulted in extreme pressure from US President Bill Clinton. Then in 1998, under the leadership of Prime Minister Atal Bihari Vajpayee, DRDO chief Dr. A.P.J. Abdul Kalam and Chairman of Indian Atomic Commission R. Chidambaram, India carried out five underground nuclear tests. These tests shocked the West, prompting strong condemnation and sanctions from Clinton administration. India justified that it is facing threat from nuclear armed neighbour with whom distrust persisted due to unresolved border issues. After, around three decades of international sanctions on India’s nuclear progress India’s vigorous efforts in nuclear domain and shift in US economic policy led both the nations to initiate negotiations in 2005. The negotiations ultimately led to a civil nuclear deal in 2008 between PM Manmohan Singh and President George W. Bush.⁹

On July 18, 2005, both the governments launched the India-US Civil Nuclear Cooperation Initiative. The initiative undertook the following broad, mutually agreed goals:-

- (a) To undo the core differences that hampered their relations.
- (b) To boost their economic and energy growth in an environmentally sound way.
- (c) To support international non-proliferation regime.

- (d) India to commit all of its civilian nuclear facilities to IAEA safeguards.

On August 1, 2008 the governors of IAEA accepted India's safeguard agreement. This agreement granted waiver from NSG and permitted India and USA to carry forward their nuclear trade deal for India's peaceful nuclear sector. On December 6, 2008 India – US signed the '123 Agreement' under Section 123 of US Atomic Energy Act 1954. The Agreement ended technological denial and nuclear isolation against India that had been in place for three decades. It enabled India to engage in civil nuclear cooperation with the US as an equal partner, and helped address its energy security and environmental challenges. Most importantly it brought India the recognition of non-NPT State with nuclear program equivalent to IAEA standards for which it had strived for over decades. In response, India agreed to put its existing fourteen and future nuclear power plants under IAEA safeguards. As per the terms, India also closed its CIRUS research reactor and replaced it with French APSARA.^{10 11 12 13}

The Quest for NSG Membership

The NSG guidelines aligns with various international standards in the field of nuclear non-proliferation which includes major treaties such as NPT, Treaty of Tlatelolco (Latin America), Treaty of Rarotonga (South Pacific), Treaty of Bangkok (Southeast Asia), Treaty of Mongolia (Mongolia), Treaty of Semipalatinsk (Central Asia), Treaty of Pelindaba (Africa – except South Sudan) etc. Such treaties restrict countries from testing, developing, or deploying nuclear materials or technology. For instance Namibia, one of the top five largest producers of Uranium, agreed to trade nuclear fuel with India in the year 2009. However, that hasn't happened, as Namibia is a signatory to Treaty of Pelindaba, which controls the trading in Uranium from Africa to the rest of the world. The 2008 waiver enabled access of advanced nuclear technologies to India that could be used for enrichment process. The deal indeed helped India; however the success was restricted to US technologies only. Hence the desire to improve nuclear trade and utilize nuclear energy for peaceful purposes, India started bidding for the NSG membership since its first formal application in 2016.^{14 15 16}

India being a responsible nuclear state since 1974, the NSG membership has remained a one of the central concerns of India's foreign policy over a decade. Few key reasons that forms the basis for 'why India needs to join NSG' are listed below –

- (a) **State-of-Art-Technologies:** The membership will unlock access to state-of-art technologies which currently India does not possess such as Generation IV nuclear reactors, enriched Uranium, single flagship reactor design such as France's European Pressurised Reactor (EPR), Small Modular Reactors (SMRs), Pyro-processing for fast reactors, etc.

- (b) Energy generation at commercial level:** Being a member of group means India could initiate commercial production of nuclear energy and equipments, which could be sold for civil use to other countries as well in future.
- (c) Boost to indigenous production:** With enhanced access to nuclear technology India could stimulate considerable economic growth through indigenous production of equipments which would improve Foreign Direct Investments (FDIs) in India, employment generation, and foster the development of supporting Indian industries under the Government of India's initiative of 'Make in India'.
- (d) Harnessing Indian approach to international stage:** India's nuclear program holds a unique position. Its natural resources provide limited Uranium (U 233) but abundant Thorium (T 232) which can be used to produce nuclear energy. The properties of T232 do not allow any country to use it directly as fuel but it can be converted into U 233 (synthetic fissile isotope) in a nuclear reactor. It is the same technology which India operates its three-stage nuclear power program. This technology is a notable example of using available resources effectively and sustainably which aims to increase India's energy production to at least 100 gigawatts by 2047. With the NSG membership, India will bring such ideas on the international stage, benefitting other countries with small or developing civil nuclear programs.^{17 18}
- (e) Meeting Climate Change Goals:** India has pledged to reduce its fossil fuel consumption and ensure around 45% of energy generated in India is from cleaner sources at the Paris Climate Agreement. To reach this goal, India needs to improve its nuclear energy generation because nuclear power is considered as cleaner source of energy as it does not release any greenhouse gases or other harmful pollutants making it good alternative of traditional fossil fuels.¹⁹
- (f) Expansion of Non-Proliferation objectives:** India has a long standing impeccable non-proliferation record. As a responsible nuclear power, India has never been a source of proliferation of crucial nuclear technologies. The inclusion will expand the scope of NSG by allowing them a greater access to India's nuclear plants, enable more transparency and improved risk monitoring.

Challenges

The major challenge India is facing to gain membership is NSG's consensus voting system. Consensus voting requires all the participating governments to draw a unanimous decision and

agree to any changes made. The 2008 waiver divided the participating governments into three distinct groups – first group consist of countries such as Russia, US, France and the UK, which were in complete favor of India. Second group includes Germany, Japan and Canada who were in favor of India but request more persuasion. The last group highly opposed India's entry which includes China, Austria, Ireland, New Zealand and Switzerland. The two broad discussions put forth by the opposing parties were that India is not a signatory to either NPT or the Comprehensive Test ban Treaty (CTBT), or accepting moratorium on producing fissile materials, and another argument was suspension of all types of nuclear tests.²⁰

The fact that India is not a signatory to the NPT, yet has applied for NSG membership, presents a distinct dimension that needs to be examined. India believes that treaties like NPT are discriminatory in nature which hampers India's sovereignty. While India does not meet this criterion, there is no such clause which binds any country to meet all the factors, to begin with NSG. Hence, if a consensus is built, then the country that does not meet all the criteria can be brought into the group. According to one of the factors stated by NSG that are taken into account for participation includes - *“Be a party to the NPT, the Treaties of Tlatelolco, Rarotonga, Pelindaba, Bangkok, or Semipalatinsk, or an equivalent international nuclear non-proliferation agreement, and in full compliance with the obligations of such agreement(s), and, as appropriate, have in force a full-scope safeguards agreement with the IAEA”*. Despite, India being a signatory to IAEA's safeguards agreement (2009) and additional protocol which came into force in 2014, and being a part MTCR (2016) which is an international nuclear non-proliferation agreement, India is still struggling to become a participant of the group.²¹

Secondly, India has a very firm stance on its right to conduct tests in future. It has clearly conveyed that India may conduct additional tests, if necessary in its national interest. However, India, as a responsible nuclear state would continue to observe its voluntary halt of testing, follow its policies of credible minimum deterrence and 'No First Use'.²²

Recommendation

(a) India has a long standing commitment to the idea of nuclear disarmament since its independence. In 1954, Prime Minister Jawaharlal Nehru outlined a proposal for nuclear disarmament (standstill agreement), and warned of the inherent threats that the spread of nuclear weapons could bring. The argument India brings to the table is that, the adoption should be universal, non-discriminatory, and total elimination of nuclear weapons.²³

(b) The NSG can adopt a certain sets of criteria that a participating government must meet before applying for membership. The criteria should be based on the country's proliferation

records, norms adopted against testing, disarmament efforts and nuclear safety and security practices.

For instance, one of the reasons China is blocking India's bid is Pakistan's membership application. Given proliferation history of both the nations, India being a responsible state with no proliferation record, Pakistan on the other hand, especially after Scientist AQ Khan Network which illegally supplied nuclear technology to Iran, North Korea, and Libya raises concerns.

(c) NPT should not be a factor of consideration to either approve or deny membership of NSG. Other factors should be taken into consideration, as mentioned in the guidelines, similar to how France was granted membership in 1974 before signing NPT in 1992.²⁴

Conclusion

India has always proven itself as a responsible nuclear power state whose nuclear capabilities should do the world a lot good than any harm. Its pursuit of NSG membership has evolved into a defining test of how rising powers are absorbed into the current international nuclear order. Although India already enjoys the rights of nuclear commerce granted by the 2008 waiver, full NSG membership carries a symbolic and strategic value which will affirm India as a responsible nuclear state, giving it a voice in global nuclear governance. Technically, India has fulfilled almost all conditions required for membership, however, India's non-NPT status and opposition from NSG's certain participating governments, particularly China, continue to complicate its entry procedure, despite the fact that its entry would bring significant advantages. By allowing a major market, a prospective supplier, and a state with advanced technological capabilities to join the group would expand group's relevance in a rapidly changing global energy landscape.

Ultimately, India's accession should be viewed not as a concession but as a mutually beneficial step. As both India and the NSG navigate the global challenges ahead, sustained dialogue and consensus building will be crucial. If properly pursued, India's full membership can reinforce the integrity of the non-proliferation regime while embedding a rising nuclear power more firmly within the global governance framework.

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