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The crisis in the International Nuclear Order - How sustainable is the Non-Proliferation Treaty (NPT) centered INO?

by
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The crisis of the Nuclear Proliferation Treaty (NPT) centered International Nuclear Order (INO) is not of a recent vintage. The NPT which perpetuated nuclear inequality (derisively but aptly labeled 'Nuclear Apartheid' for creating nuclear 'haves' and 'have nots') indefinitely, or at least till 1995, was signed in 1968 and was rendered vulnerable from its very inception owing to its inherently skewed nature. Questions about the survivability of the NPT were raised as early as in the 1970s, both before and after the first NPT Review Conference. However, it managed to survive as 'the only game in town'. Yet the series of irritants that have emerged in the last two odd decades viz. the May 1998 Indian and Pakistani nuclear tests, collapse of the UN inspection efforts in Iraq, the slow implementation of START II, the US Senate's rejection of the CTBT and the US plans to deploy a National Missile Defense, all of which profoundly undermine the ability of the mechanism to stem global nuclear proliferation and make the current crisis in International Nuclear Order qualitatively different from the past crisis. The 'nuclear renaissance' sparked by an energy crisis witnesses a renewed interest in nuclear power as an alternative energy source and rationalizes a scramble for nuclear programs. What is wanting in the face of the present crisis of credibility is a shared sense of what the system of deterrence could or should encompass to make it potent and how best to manage it. Even as there is widespread global acceptance on the imperativeness of the goal of a nuclear-free world, what eludes the world community is the consensus as to the best strategy for attaining that goal. The question of the viability of the NPT regime comes into sharper focus on the question of the ability of the regime to integrate into the INO, India and Pakistan (both Nuclear Weapon States who have steadfastly refused to sign the NPT) without destroying the nuclear non-proliferation regime and its linchpin, the NPT.



The Research Paper proposes that to stem the further erosion of credibility of the present International Nuclear Order, it is imperative to link nuclear proliferation with universal, non-discriminatory nuclear disarmament within a time frame by either formally amending the Non Proliferation Treaty (NPT) or even formulating a new International Nuclear Order (INO).

I. THE INTERNATIONAL NUCLEAR ORDER DURING THE COLD WAR.

After the Cuban missile crisis of 1962, the US and the Soviet Union realized that they had to accommodate one another and engage in meaningful arms control, and they possessed a common interest in the development of a non-proliferation regime.¹ The International Nuclear Order established in the 1960s thus resulted from a compromise between the Nuclear Weapon States (NWS) and the Non-Nuclear Weapon States (NNWS) and is embodied in the Nuclear Non-Proliferation Treaty (NPT), signed in 1968 and entered into force in 1970. This order was based on two interrelated systems of cooperation a managed system of deterrence. whereby a recognized set of

states would continue using nuclear weapons to prevent war and maintain stability, but in a manner that was increasingly controlled and rule-bound; and a managed system of abstinence, whereby other states would give up their sovereign rights to develop, hold and use such weapons in return for economic, security and other benefits.² This was rejected from the start by the non-nuclear states like India and others accusing the NPT of establishing 'nuclear apartheid' due to its discriminatory nature creating a regime of haves and have-nots with different rights and obligations. The Superpowers, the United States and the Soviet Union were designing a treaty to stop the spread of nuclear weapons to other countries, while India was seeking a treaty that would, as part of the bargain, freeze and ultimately roll back the production of nuclear weapons that had already occurred. The issues of disarmament, security guarantees, and the promotion of peaceful uses of atomic energy, including peaceful nuclear explosives, all the legitimate concerns of the nuclear have-nots were consigned to the background inviting a chorus of outrage from across the world. West Germany noted that the treaty failed to provide "the more comprehensive solutions" required to deal with the nuclear menace.³ Sweden frequently inveighed against the treaty's unbalanced obligations and its failure to require nuclear disarmament.⁴ Italy, a NATO member, agreed with this criticism, noting that the treaty concentrated only on the limited problem of future proliferation but failed to deal

with "the extremely serious and urgent problem of those who have exploded nuclear devices".⁵ Japan too expressed strong reservations, demanding that the treaty not impede the non-nuclear states' development of nuclear industry, and that it must provide for security guarantees and significant progress toward nuclear disarmament.⁶ The French defense minister characterized the treaty as an effort "to castrate the impotent."⁷ Both superpowers regarded the demands for assurances and compensation by the non-nuclear weapon states "as something of an irritant."⁸

II. POST-COLD WAR CHALLENGES

The long-standing weaknesses associated with the non-proliferation framework have been further exposed in the last two decades or so. Expectations were high with the ending of the Cold War that the Nuclear Non Proliferation Norm (NNPN) would receive a considerable boost. However certain developments underlined the weaknesses in the regime's detection and enforcement capacities, and the power of external shocks lead to a recalculation of the norm's capacity to contribute to national and global security.

Although the existence of an Iraqi chemical weapons programme had been widely known before 1990, United Nations Special Commission on Iraq inspections revealed that it had nearly developed a nuclear weapon, despite having allowed required IAEA inspections of its declared nuclear facilities, the secret nuclear weapons programme operating in undeclared facilities inaccessible to the IAEA. These revelations led to tightening of export control mechanisms in many countries in Europe and IAEA's rights of special inspection in cases where it had reason to believe that there might be important undeclared nuclear facilities in a country.⁹ The IAEA discovery of the North Korean separation of plutonium from spent fuel followed hard on the heels of revelations of extensive bomb-making activities in Iraq. North Korea's refusal to cooperate, either in disclosing its nuclear record or, more importantly, in dismantling all of its weapons and related production capability, would set a floor below which the other nuclear-weapon states would not reduce their own arsenals. Libya's decision to abjure its nuclear weapons programme in 2003 completed evidence on a trio of cases

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state members of the NPT that had acquired nuclear technology, primarily based on imported items.¹⁰

A party to the NPT, Iran broke its safeguards agreement and failed to cooperate with the IAEA to resolve all outstanding questions regarding the exclusively peaceful nature of its nuclear activities, defying proper enforcement mechanisms of the non-proliferation regime. The Western powers used Iran's acceptance of the NPT clauses as the basis of passing resolutions in the United Nations which then implemented stringent financial sanctions on the country that severely affected its economy and polity. However, a historic nuclear nonproliferation agreement was struck on July 14 between Iran and six world powers, the P5+1 (the five permanent members of the United Nations Security Council—China, France, Russia, United Kingdom, United States—plus Germany), and the European Union, known as the Joint Comprehensive Plan of Action¹¹, which will severely curtail Iran's nuclear capabilities for at least 15 years¹² and put in place a multilayered verification and monitoring regime.¹³ The agreement provides that in return for verifiably abiding by its commitments, Iran will receive relief from U.S., European Union, and United Nations Security Council nuclear-related sanctions. It is safe to say that over the next decade and more, enough scrutiny can be applied on Iran to make sure it is unable to put together a nuclear weapon.

Moreover, the attempts to contain Iran's programme prior to the signing of the Deal with Iran were undermined by the striking of a cooperative deal in the civilian nuclear field between India and the United States in 2008. President George W. Bush signed an act permitting civilian nuclear cooperation with New Delhi that awards India open access to the United States' and other countries' nuclear fuel and reactors as well as to US nuclear technology. The deal also accepts the Indian position that only some of its nuclear facilities would be placed under IAEA safeguards, despite NSG guidelines which required its members to allow nuclear transfers only to



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those states with comprehensive safeguards in place.¹⁴ After strong Bush administration lobbying, in September 2008, the consensus view of the NSG was that the global ban on nuclear trade with India should be lifted—an exception to the rules that opens the opportunity for others (notably Pakistan) to argue for similar exception in their cases. Neither was the agreement with India made conditional on any compensatory measures, such as Indian signature of the CTBT.

The decision of the US Senate to defeat the Comprehensive Test Ban Treaty in 1999 on the grounds that it could not be verified adequately and that that future US weapon testing might be required yet again delivered a serious setback to the supporters of non-proliferation. A certain return of nuclear weapons to center-stage was facilitated by the decision of the Clinton administration to indefinitely postpone negotiation for a START-III with Russia (despite the Russian offer to move below the limit of 2,500 warheads originally established for these negotiations).¹⁵ Bush administration's Nuclear Posture Review of December 2001 re-legitimized nuclear weapons as weapons of war as official nuclear doctrine¹⁶ while abandoning and even denigrating traditional

nuclear arms control accords. The Bush administration provoked skepticism abroad by working with the nuclear industrial complex, proponents within the military, and the Congress to develop a new class of so-called bunker-buster nuclear weapons designed to destroy hardened or buried Weapons of Mass Destruction (WMD) facilities. Bush also supported efforts to maintain "replacement" nuclear warheads in addition to those officially listed as part of the active nuclear arsenals. The United States refused a Russian demand to promote the CTBT at the 2005 Review Conference. Each of these positions undermined U.S. credibility on nuclear arms control, disarmament and non-proliferation within much of the international community.¹⁷

India for many years, was an eloquent critic of the unjust international order embodied in the NPT, challenging it from the outside, notably by testing a 'peaceful nuclear device' in 1974 and then pursuing a policy of 'keeping the nuclear weapon option open' for twenty four years, until it went openly nuclear with the May 1998 nuclear tests. India continued to demand mutuality, balance and serious provisions for halting the further acquisition



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of nuclear weapons and delivery vehicles by the nuclear powers and officially remained committed to "the goal of a truly comprehensive" ban on all underground nuclear testing.

In conducting 11 nuclear tests in 1998, India and Pakistan did not violate any treaty they had signed. But they did breach the global anti-nuclear norm and were roundly criticized for doing so.¹⁸ The Indian and Pakistani nuclear tests did not deal a fatal blow to the international nuclear order, but they seriously damaged it, because 'they undermined the principle of universality that had been emphasized at the NPT Extension Conference, obstructed the entry into force of the CTBT and the negotiation of the Fissile Material Control Treaty (FMCT) and damaged the NPT's prestige in the eyes of other leading states that had foresworn nuclear weapons.¹⁹ South Asia's nuclearization reinforced the deterioration of the INO, exacerbated by the de-facto recognition of India and Pakistan as Nuclear Weapon States. The Nuclear tests also challenged the assumption that a permanent and universal shrinkage of nuclear arms is underway. Arguably, India's unofficial entrance to the 'nuclear club' undermines the NPT regime blunting India's edge as the erstwhile champion of the non-aligned pressure on disarmament.

After the May 1998 nuclear tests India has fewer incentives to sign an FMCT considering the open-ended nature of its search for a 'credible nuclear deterrent' and its rapprochement with the United States. The US-India nuclear deal of 2008 legitimizes India's status as a de facto nuclear weapon state without an Indian commitment to freeze the production of fissile materials for nuclear weapons. Moreover, the US-India nuclear deal frees up India's domestic uranium to increase its stockpile of weapons grade fissile for its nuclear weapons programme.²⁰

The indefinite retention of nuclear weapons by the five declared nuclear weapon states (plus India, Pakistan and Israel²¹ as de facto weapon states) despite Article VI of the NPT stating that the possession of nuclear weapons should only be temporary and that the international goal ultimately was to eliminate them and their continued reliance on the doctrine of deterrence undermine the core bargain of the NPT and threaten the treaty's survival.

III. NUCLEAR ENERGY RENAISSANCE-A PROSPECTIVE PROLIFERATION NIGHTMARE.

The nuclear order created in the Cold War and founded on the NPT is experiencing entropy just as interest in expanding nuclear energy is rising. Calls for nuclear disarmament are intensifying just as nuclear energy is expected to expand greatly worldwide thus exacerbating the tension between the objectives of nuclear disarmament and the expansion of nuclear energy. The potential global expansion of nuclear energy over the next decades carries proliferation risks if there are not new and reliably enforced rules for managing it and keeping it secure. Ways have to be sought to make the expansion of nuclear energy compatible with progress towards non-proliferation and elimination of all nuclear arsenals. But key non-nuclear weapon states are already expressing deep reluctance to consider any new rules if the nuclear weapon states do not undertake a yet to be defined plan for nuclear disarmament.²² At the same time, the nuclear-armed states will not agree to eliminate their nuclear arsenals if they are not confident that proliferation will be prevented through the enforcement of stronger non-proliferation rules.

With demand for nuclear fuel projected to rise dramatically, several states, including Argentina, Brazil, Canada, Iran and South Africa, have either expressed an interest in developing enrichment programmes or have already begun such programmes. Many international leaders recognize that the spread of fuel-cycle facilities to non-nuclear weapon states poses a proliferation risk.²³ States that possess such facilities for civilian purposes could use them, or associated know-how, to produce fuel for weapons. Proposals to resolve this central dilemma are being developed. The World Nuclear Association, the IAEA and the Nuclear Threat Initiative²⁴, along with a number of states, have proposed various mechanisms for assuring fuel supply in the hope that states will choose to eschew new national facilities for enriching uranium and separating plutonium.²⁵ In some of the proposals, fuel would be supplied on the condition that the state forgoes national fuel cycle capabilities.

Another major potential tension between the growth of nuclear energy and non-proliferation veers around global shortages in the capacity to

produce nuclear reactor components. For the next decade, the world's nuclear industry can probably build no more than ten reactors per year.²⁶ For both commercial and technical reasons, established vendors will be less interested in non-nuclear weapon states in the developing world, especially the less politically stable ones. If developing countries seeking nuclear cooperation are thereby rebuffed, and feel that their right under Article IV of the NPT to assistance in developing nuclear technology for peaceful purposes is being disregarded, they could become still further alienated from the non-proliferation regime.

The problem of the shortfall in the global capacity to manufacture reactors is compounded by skill shortages. Even without a nuclear renaissance, finding enough inspectors to implement all the verification measures necessary to facilitate disarmament would be a stiff challenge. Clearly, if a nuclear-weapons-free-world is to be achieved alongside a global expansion of nuclear energy, considerable investment

in training will be required. Technological developments in the future could make it harder to safeguard civilian nuclear activities. Experience in Libya and Iran (Iran's centrifuge programme was initiated in 1985 and was still fairly embryonic when it was revealed in 2002) seems to show that the difficulty of getting centrifuge technology to work has been an important barrier against unsafeguarded fissile-material production.²⁷ Iraq suffered similar, if less acute difficulties. This barrier may be gradually eroded as more states acquire advanced industrial bases. It is also possible that other enrichment technologies that can be concealed more easily than the gas centrifuge will come into play over the long term. Laser enrichment, if it could be made to work on a commercial scale, would be of particular concern.²⁸

Although it is the IAEA's ability to detect the diversion of nuclear material from declared civilian facilities that has repeatedly come under a scanner most in the context of non-nuclear weapon states with nuclear programmes, the more challenging task is in fact detecting undeclared nuclear facilities, especially small gas-centrifuge enrichment plants. Instead of increasing the frequency of inspections so that diversions could be detected more rapidly, the IAEA has, however, been altering its practice in the opposite direction in the past few years.²⁹ Worse, enforcement has taken much



longer than detection. For instance, the warning that the international community received in August 2002 of Iran's clandestine uranium-enrichment programme was timely but it was almost four and a half years before the UNSC passed its first resolution in December 2006, and by July 2008, Iran had still not complied with that or two further sanctions resolutions. Recent experience shows that states may view it in their interest to question the judgment of the IAEA and not immediately accept its conclusions. When Iran's clandestine nuclear programme was discovered, Russia, China and other states delayed action by insisting that the IAEA provide proof of Iran's intentions. The difficulty is more acute in the case of clandestine facilities where it may be impossible for the IAEA to prove that a clandestine facility exists unless it can inspect the site. Recent experience suggests that the Security Council might not back an IAEA request for access without first requiring stronger evidence than the IAEA could provide without an inspection.³⁰


Currently, the IAEA's authority and ability to verify that military research and development is not connected to nuclear weapons is very limited, especially where no nuclear material is involved.³¹

Needless to say, the expansion of nuclear energy will threaten security if it is not coupled sustainably and viably with the universal adoption of the toughest verification and inspection protocols and other instruments, such as new rules for managing the nuclear fuel-cycle.

IV. CONCLUSION

Despite its discriminatory nature, the NPT was conceived as a first step toward more far-reaching disarmament measures. In this sense, the NPT implicitly questioned the soundness and acceptability of basing international peace and security on perpetual nuclear deterrence. The challenges to the current status of the NPT raise the specter that we are on the verge of an era where several new states and possibly non-state groupings acquire nuclear weaponry. In the past, moral and legal discourse, at both societal and governmental levels, boosted the strength of that norm, but the behavior of the major NWS in relation to it is also significant to its present and future. The NPT

is still supported by a majority of the international community with 188 NPT parties and four NPT holdouts (India, Pakistan, Israel and North Korea). What is required is a new, truly disarmament

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oriented INO, aiming at the final elimination of nuclear weapons within a concrete time frame, enshrined in a abolitionist accord (comparable to the Biological and Toxin Weapons Convention, 1975 & the Chemical Weapons Convention, 1997) and a way station towards this could be a revived, reinforced and more equitable NPT which would involve a combination of effective collective enforcement mechanism against non-compliers such as Iran and North Korea and a renewed commitment on the part of the Nuclear Weapon States, especially the United States of America (since USA is the primary link between regional dynamics, the wider global order and prospects for advancing towards nuclear abolition) to implement their Article IV obligations to dismantle their nuclear arsenals. The Iran nuclear deal conveys that we have entered a phase of ad hoc approaches to proliferation concerns, employing specific political geometries, whether the Joint Commission that is part of the Iran deal, or bilateral efforts and the six-party talks (the United States, North and South Korea, Japan, China, and Russia), which were less successful in dealing with North Korea's nuclear ambitions. Perhaps we are getting better at ad hoc approaches.

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¹ W. Walker, *Nuclear Order and Disorder*, 76 INTERNATIONAL AFFAIRS 706 (2000).

² W. Walker, *Nuclear Order and Disorder*, op. cit., 703-706.

³ GLENN T. SEABORG, *STEMMING THE TIDE* 356 (Lexington Books, 1987).

⁴ *Ibid.* 357.

⁵ *Ibid.* 356.

⁶ G.C. MIRCHANDANI, *INDIA'S NUCLEAR DILEMMA* 137 (Popular Book Services 1968).

⁷ *Ibid.*

⁸ Glenn Seaborg, op.cit. 198.

⁹ SARAH J. DIEHL & JAMES CLAY MOLTZ, *A HAND BOOK OF NUCLEAR WEAPONS & NON-PROLIFERATION*, 19 (Pentagon Press 2005).

¹⁰ ROSEMARY FOOT & ANDREW WALTER, *CHINA, THE UNITED STATES, AND GLOBAL ORDER*, 142 (Cambridge University Press, 2011).

¹¹ Daryl G. Kimball, *Building on the Iran Deal*, (October 2015) Arms Control Association, <https://www.armscontrol.org/taxonomy/term/60>.

¹² Iran agreed to eliminate its stockpile of medium-enriched uranium, cut its stockpile of low-enriched uranium by 98%, and reduce by about two-thirds the number of its centrifuges for at least fifteen years. For the next fifteen years, Iran will only enrich uranium up to 3.67%. Iran also agreed not to build any new uranium-enriching or heavy-water facilities over the same period. Uranium-enrichment activities will be limited to a single facility using first-generation centrifuges for ten years. Other facilities will be converted to avoid proliferation risks.

¹³ To monitor and verify Iran's compliance with the agreement, the International Atomic Energy Agency (IAEA) will have regular access to all Iranian nuclear facilities.

¹⁴ MARIO ESTEBAN CARANZA, *SOUTH ASIAN SECURITY AND INTERNATIONAL NUCLEAR ORDER. CREATING A ROBUST INDO-PAKISTANI NUCLEAR ARMS CONTROL REGIME*, 470-473 (Ashgate Publishing Company 2009).

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- ²¹ Israel maintains a hypocritical silence on its own status relating to nuclear weapons while being subjected to very little pressure on the same by the West.
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- ²³ UN Secretary General Kofi Annan, 'Address to the Nuclear Non-Proliferation Treaty Review Conference' (May 2, 2005), <http://www.un.org/events/npt2005/statements/npt02sg>.
- ²⁴ The World Nuclear Association represents and promotes the nuclear industry and the Nuclear Threat Initiative is an NGO working on reducing the risk of use and preventing the proliferation of nuclear, biological and chemical weapons.
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