FACTORS INFLUENCING THE FORMULATION PROCESS OF THE SCHIZOPHRENIC U.S NUCLEAR POLICY

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ABSTRACT

An emphasis on international stability has put nuclear capabilities of States on the security agenda making US nuclear policy a very pertinent international relations (IR) study item. To better understand the current schizophrenic nature of American nuclear policy, one must look at the factors that lay the foundations of nuclear policy formulation. The following paper describes and showcases the relevance and significance of neorealist theory, the anarchic international system of governance, and the concepts of deterrence, strategic stability, arms control, non-proliferation and disarmament, as central to understanding the policy.

Looking at neo-realist power and states as rational actors, the paper presents a framework of understanding that can assist when trying to understand the dual nature of American nuclear policy. The modern day international nuclear regime based on International Atomic Energy Association and the Treaty (NPT) on the non-proliferation of nuclear weapons has the same core variables engrained within it as the American Nuclear Posture Reviews (NPR) and these are discussed. The paper highlights NPT, NPRs, and relevant IR realities and arrangements to showcase the structural hindrance of policies on the aforementioned factors despite the insistence of all actors on moving away from them.
American Security & Nuclear Policy
Significance of Nuclear Policy

With the advent of atomic weapons, the stakes were drastically raised for the safety and security of the world. In 1945, the Japanese city of Hiroshima experienced the effects of mankind’s first atomic bomb with 66,000 deaths (Freedman, 1989). Shortly after, a second city – Nagasaki experienced a similar faith with 40,000 deaths (ibid, 1989). The speed with which the devastation was caused was unprecedented and the quick escalation of warhead size, from a range of 14 to 20 kilotons in 1940s to as high as fifty megatons by early 1960s (Russian Tsar Bomba Test: October 1961), meant that the issue of nuclear weapons became very significant and central in defense policy.

Size of warheads must be given some light to get a better understanding of the significance of nuclear weapons, their potential impacts, and their importance to policy as it relates to defense and security. A 20-kiloton nuclear warhead is equivalent to twenty thousand tons of TNT, whereas the 50-megaton nuclear warhead is equivalent to fifty million tons of TNT (Freedman, 1989). The potential wide spread implications for the human race in the context of nuclear fall out, the resulting radiation effects of a nuclear detonation and the severe subsequent long-term side effects to human health, productive land and the economy are high. This has lead to a
complex web of treaties, alliances and international commitments. As part of this strategic landscape, many states have developed comprehensive multi-pronged nuclear policies. Utilizing neo-realist theory to map out the nuclear policy arena, it is my intent to detail and analyze factors that have influenced the United States’ current nuclear policy. I further aim to highlight its schizophrenic nature.

America’s nuclear policy has been a moving target that includes multiple factors that are constantly assessed and reassessed throughout its formulation (Sagan, 1989). The quadrennial defense and nuclear posture reviews are examples of such policy formulation processes. Nuclear policy here is not interchangeable with Nuclear Posture Review (NPR), which is the nuclear stance of the United States. NPR is not the only document of American nuclear policy. The policy formulation process is complex and continuously shifting to deal with current international affairs. With this logic, the NPR has been intentionally kept as a very flexible document and serves as a ‘guiding principles’ strategy. For the purposes of this paper, it is a significant document that is looked at to better understand the overall American nuclear policy strategy.

**Nuclear Posture Review: How, What and Why?**

NPR outlines the US administration’s approach to American strategic nuclear policy and weapons. The Secretary of Defense in
consultation with the Secretaries of State and Energy conducts the NPR as mandated by Congress. The Department of Defense (DoD) is the head agency, and the Office of the Secretary of Defense and the Joint Staff lead the review jointly. Close co-operation is cited between the various military departments and combatant commands and U.S. Strategic Command with partner departments of Homeland Security and Treasury and Office of the Director of National Intelligence. The coordination and integration required for such a strategy is evident through the wide breadth of issues that have to be dealt with under the umbrella of ‘nuclear’. This fact makes the policy document rich and significant for not just DoD but for all US administrative, executive and legislative bodies.

To understand the changing realities of nuclear policy and its place within security and defense agendas, it is imperative to understand the paradigms that have gotten us to this juncture. It is recognizable that a nuclear policy is an indispensible part of the US security agenda because the nuclear policy of US “must reflect the President’s national security priorities and support the defense strategy objectives” (QDR, 2010). This makes it intrinsically a part of US Defense Policy. The very output of the high-level policy formulation process and one of the source documents of this paper, NPR itself is a process. It is a process “that determines what the role of nuclear weapons in US security strategy should be” (NPR 2010). It has
therefore never been a question of whether or not nuclear should be used as part of a security agenda, but a question of the role it should play within it. Logically then, the policy stances regarding the role of nuclear in the overall security and defense strategy is debated and renewed regularly. Thusly, NPR is one tool to highlight policy shifts within United States. Despite being significant due to the shifts it can cause within defense and military establishments, it is not the only policy tool that should be studied.

General American status-quo regarding nuclear power is summed up well by the previous Defense Secretary, Robert Gates, who verbatim stated that “as long as nuclear weapons exist, the US must sustain a safe, secure, and effective nuclear arsenal to maintain strategic stability with other major nuclear powers, deter potential adversaries, and reassure our allies and partners of our security commitments to them” (DoD, 2006). This reasoning has characterized successive administration's nuclear stance including Obama administration’s NPR. Nuclear Posture of United States then must be understood by viewing the world through US security lens focusing on strategic stability and deterrence. To understand strategic stability and deterrence as factors effecting American nuclear policy, the evolution of the NPR as an overarching strategic document must firstly be understood.

Key Differences:

There have been three postures reviews to date, conducted in 1994, 2001 and 2010 by the Clinton, Bush and Obama administrations. After Clinton’s NPR, such a review was congressionally mandated with DoD leading the interagency review. Prior to this, the initiative was taken on an ad-hoc basis due to post cold war realities. Over time, the review has taken on a much broader scope and has moved away from addressing the remnants of cold war nuclear force structures. In 1994, the nuclear review “was a very small group of people focused on a very narrow question” (DoD – NPR annex, 2010). Additionally, this review did not have buy in from the executive branch. This is evident in the fact that in the 2001, the NPR was leaked prior to completion in unclassified form and the administration hesitated to speak of it due to it being labeled as a leaked classified document (ibid, 2010).

The security realities have changed significantly since 1994, with the latest review looking at strategy questions and focusing on issues of nuclear force and capabilities in the broadest sense. It was cited as one of the reasons why the NPR of 2010 took so long - larger scope, and subsequently the broader process of input and discussions. The 2010 review also looks at efficiency, effectiveness and capacity of
capabilities to deter and provide reassurances to allies. Prior reviews did not look at the efficiency or the effectiveness of its deterrence goals. It assumed the policy will be effective and its deterrence goals will be met if the policies set by NPR were undertaken and properly implemented. Unlike the previous two NPRs, the 2010 version is heavily interagency driven and formalizes this process further (DoD, 2010). Other key differences include consultations with stakeholders, of which there were 80, including think tanks, senior executive engagement, Congress, allies, partners, NGOs and the broader analytical community (DoD, 2010). Previous reviews by contrast were created, managed and discussed within the military establishment with minimal consultations and input from partners.

Adding to the uniqueness of the 2010 NPR is the review’s one format. The 2010 NPR no longer has a classified and un-classified version and there is no information that needs to be redacted or classified (DoD, 2010). This was not the case in the past, and the logic behind this has been: to ensure transparency, outline objectives, and eliminate any concerns regarding materials that could be left out in the classified domain (DoD, 2010). However, this has lead to a watering down and less concrete proposed measures. This is one reason why NPR can be interpreted as a very flexible document with significant room for interpretation.
NPR has evolved into an “across-the-top-of-government discussion regarding nuclear weapons policy, strategy and capabilities” (DoD, 2010). As a strictly review-based process, the mandate of the NPR today is to formally provide analytical input and facilitate discussion. Its aim is not to provide answers to changing security realities but to facilitate and consider all elements of nuclear policy. With the analytical input through the NPR process, it will become apparent that many of the same factors discussed in this paper also surface repeatedly in the NPR.

Key Similarities:

NPR being one policy instrument in the broader policy arena naturally has similarities and overlap amongst defense, security, and nuclear policies. The 2010 NPR consistently uses terminology from the 2001 Quadrennial Defense Review, which states the purpose of possessing nuclear weapons is to "assure allies and friends," "dissuade competitors," "deter aggressors" and "defeat enemies" (DoD, 2010). The factors of deterrence, strategic stability, anarchic international structure, non-proliferation and disarmament are all recognized in strategy documents of QDR and NPR.

Resembling factors between the NPRs also include the special focus on Russia and the reduction of overall nuclear stockpiles. Previously, NPR 1994’s sole focus was arms reduction negotiations with Russia. This was seen as exclusively a smaller version of the
similar cold war threat. Arms reduction as a concept became central at this point and is a major factor influencing nuclear posture of the US. In 2001, NPR outlined a policy shift away from cold war mentality by planning for America's strategic forces from a threat-based approach to a capabilities-based approach (NPR, 2001). The NPR was still hindered on the concept of deterrence, as it explicitly stated that, “the new approach should provide, over the coming decades, a credible deterrent at the lowest level of nuclear weapons consistent with US and allied security” (ibid).

Parallels can also be drawn today, when one core objective of 2010 NPR is to “pursue further reductions with Russia, [and then] engage other nuclear weapons states, over time, in a multilateral effort to limit, reduce, and eventually eliminate all nuclear weapons worldwide” (NPR 2010). The goal of arms reduction while maintaining a credible deterrence is therefore a key concept in understanding US nuclear posture and policy. NPR is always in line with the thinking of all presidents regarding disarmament. Without exception, all Presidents excluding Harry Truman have felt the need to work towards a world without nuclear weapons. The 2010 NPR is reflective of this and therefore states that America needs to “strengthen regional security architectures while placing increased reliance on non-nuclear deterrence capabilities” (DoD, 2010).
In addition to the goal of nuclear stockpile reduction to move towards the dream of living in a world free of nuclear weapons, the significance of allies and their role is a consistent theme in the NPRs. The 2010 NPR states that a key objective is “strengthening regional deterrence and reassurance of U.S. allies and partners” (NPR 2010). This trend has continued from the 2001 NPR, which stated that “nuclear weapons play a critical role in the defense capabilities of US, its allies and friends” and further that possessing nuclear stock allows “US to counteract WMD-backed coercive threats and to use its power projection forces in the defense of allies and friends” (DoD NPR 2001). This is significantly different from the 1994 NPR focusing exclusively on America, and American interests internationally with no mention of allies and partners. The trend from 1994 to 2001, and further from 2001 to 2010 therefore has been a substantial increase in the need to include allies and partners in nuclear policy.

As touched upon earlier, the need for strengthening deterrence is a theme that is evident throughout the three reviews with no changes. However, how the deterrence challenge is addressed has differed significantly. Deterrence is moving away from nuclear-based to non-nuclear strike capabilities and missile defense. A fundamental aspect of the latest NPR is the insistence on not increasing US reliance on nuclear weapons due to rogue states and non-state actor’s reliance on nuclear weapons (DoD NPR debrief transcript, 2010).
With the aforementioned trends in mind, 2010’s Nuclear Posture Review is discussed in more detail to bring the reader up on the posture’s current status.

Nuclear Posture Review of 2010

President Obama with his speech in Prague (April 2009) outlined a nuclear agenda that prioritizes a reduced role of nuclear weapons. Furthermore, his administration’s release of NPR 2010 demonstrates the NPR’s strong support from the executive branch. The five objectives of the NPR 2010 are as follows:

1. Prevent nuclear proliferation and nuclear terrorism
2. Reduce the role of nuclear weapons
3. Maintain effective strategic deterrence and stability at lower nuclear force levels
4. Strengthen regional deterrence and reassurance of U.S. allies and partners
5. Sustain a safe, secure and effective nuclear arsenal as long as nuclear weapons remain

NPR 2010 - DoD, 2010

To further this change in posture, the Obama administration’s fiscal year 2011 budget request included a 13% increase for stockpile modernization efforts as well as funding availability for Chemistry and Metallurgy Research Replacement nuclear facility and a new Uranium Processing Facility (NPR 2010 debrief - DoD, 2010). The purpose of this strategic direction is to enhance security to strengthen deterrence of aggressors and to reassure allies and partners of U.S. commitment to their defense. Further new investments in U.S. command and
control system to maximize Presidential decision time in a nuclear crisis is also sought.

Internationally, American commitment to expanding financial support for the International Atomic Energy Agency's (IAEA) budget is outlined. Funding is increased to meet current IAEA challenges of strengthening institutional support, development of tools, capabilities, technologies and expertise. Furthermore, a vision for short-term support of Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and stricter enforcement and non-compliance consequences are highlighted. For a complete list of objectives and tangible steps dealing with each policy bullet, please access the full NPR online at the DoD's NPR website. The purpose of this paper is to detail the factors behind the nuclear policy formulation of the United States, therefore only the broadest objectives identified by NPR are listed here. This is done to showcase the effect of these factors on the NPR's schizophrenic nature. The policy goals of NPR 2010 are to:

- Continue focus on preventing nuclear proliferation and nuclear terrorism,
- Strengthen regional security architectures while placing increased reliance on non-nuclear deterrence capabilities,
- Engage Russia, after ratification and entry into force of New START, in negotiations aimed at achieving substantial further nuclear force reductions,
- Following further reductions with Russia, engage other nuclear weapons states, over time, in a multilateral effort to limit, reduce, and eventually eliminate all nuclear weapons worldwide,
- Continue to sustain a safe, secure, and effective nuclear deterrent as long as nuclear weapons exist

NPR 2010 - DoD, 2010
**Treaty on the Non-Proliferation of Nuclear Weapons**

Significance of nuclear weapons and the convergence of US, IAEA, and NPT objectives ensure that analysis of factors effecting nuclear policy can not be complete without looking at NPT and IAEA. Operationally, states act within the globally accepted frameworks set out by IAEA under the auspices of UN and NPT. IAEA puts structural constraints over state’s strategies and this goes harmoniously with the anarchic ordering principle of neo realism discussed later.

**NPT and IAEA:**

NPT serves as one key variable in understanding nuclear posture of the US. As discussed on the previous page, US prioritizes non-proliferation under the NPT and is additionally a founding party to it. NPT came into force in 1970, with 189 states joining. The five states considered to be ‘nuclear haves’ in the treaty are America, Russia, China, France and UK. The treaty has three main pillars: non-proliferation, disarmament, and the peaceful use of nuclear energy (Arms Control Association, 2010) and is overseen by IAEA. IAEA as an independent international organization related to UN is responsible for the 'safe guards' system. This system is used to verify compliance with the Treaty through inspections conducted by it. However, according to the UN about 40 nations now possess the industrial and scientific power to develop nuclear powers (UN, 2010). This is due to the relative ease with which it was possible to get enrichment
technology for civilian purposes. Today, this is not the case and the technology is not available in a 'no strings attached' fashion. State government's utility for military purposes instead of civilian use was the cause of this action and is exemplified well by current US-Iran relations.

Along with the pragmatic problems of enforcement and control of nuclear material under the policy direction of NPT with IAEA supervision, there are contested legal issues. The deployment of nuclear weapons in the EU countries under the umbrella of the US-NATO Nuclear Policy is an example of one such legal issue. As mentioned earlier, the American nuclear posture has increasingly extended deterrence to its allies. Continuing with this thinking, US placed nuclear weapons in nuclear-have and nuclear-have not states in Europe. These weapons are under US control at all times, however not physically on American soil. This has caused much concern due to the directly contradictory nature of the agreed-upon goal of nuclear non-proliferation vis-à-vis the NPT. The decision by US to deploy such weapons in non-nuclear states is just one example of the schizophrenic objectives of US posture. It can be described as schizophrenic because to ensure deterrence for its partners and allies, US has had to itself engage in proliferation at some level. Both factors: deterrence and proliferation are critical in understanding nuclear posture and both are at the core of this US action.
NPT, US policy and the role of non-proliferation and disarmament:

Overlap between NPT and US policy must be addressed prior to discussion of the factors of deterrence and nonproliferation in the formulation of US policy. A strong case can be made of policy congruence when it comes to the objectives of NPT and US posture. Laid out, NPT has three main pillars:

1. Non-proliferation,
2. The peaceful uses of nuclear energy, and
3. Disarmament

Similarly, American objectives of nuclear policy as outlined by the 2010 NPR are:

1. Non-proliferation,
2. Sharing of peaceful technologies,
3. Measures of arms control, and
4. Prevention of terrorism (deterrence)

(America.gov, 2011).

The two policies (one national and the other international) have the same first three objectives. In addition to the obvious parallels between them, the congruence of two is further evident considering it is recognized that “the American policy of non-proliferation, peaceful technologies and arms control has always had IAEA as a key agency responsible for enforcement and management” (DoD, 2010). The role of IAEA and NPT in helping US achieve its international policy goals is critical. America has used NPT and IAEA reports and feedback from inspectors to round up support and international consensus for action against states not in compliance. The actions have traditionally
included political, economic, financial, and military dimensions. Similarly, America has provided IAEA with its own reports and intelligence to urge IAEA to take actions that are congruent with its own foreign policy agenda.

The status awarded to NPT, as a legitimizing tool is evident when it is considered that “America is not prepared to strengthen its long-standing negative security assurance by declaring that it will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations” (NPR, 2010). This direct and blunt stance is intended to justify the legitimacy of the American policy within the international system enforced by the IAEA. Having the same core tenants at the heart of IAEA and American policy is a luxury US enjoys. American policy realigns itself with international policy, which at its core resembles American policy. In other words, there is significant policy congruence at the national (American) and international (IAEA/NPT/UN) levels. The previous statement itself acts as a deterrent and aims to limit nuclear proliferation by warning states with aspirations of increased nuclear activity (i.e. North Korea, Iran, Syria, etc). It warns and deters them by showcasing their violation of International policy in addition to American policy, legitimizing potential American or international action.

American nuclear posture and its focus on non-proliferation did
not come into play after the NPT was ratified. Far from hastily responding to NPT, US and UK proactively partook towards the three aforementioned pillars of NPT. Two years before the end of WW2 (the use of the first atomic weapon) and well before the formal drafting of NPT text, the Quebec Agreement was struck in Canada. Under this agreement, information could not be given to others regarding tube alloys, a nuclear enrichment component (Quebec Agreement, 1943). This paved the way for non-proliferative measures of earlier nuclear-haves and is also the first pillar of both the NPT and US NPR.

Secondly, the basic principle behind arms control could arguably have been established with the Quebec Agreement. This is because the Agreement explicitly states that nuclear information could not be used against any of the two signing parties - US and UK (Quebec Agreement, 1943). The purpose of arms control is to ensure the survival of the state and to eliminate threat from another state. Agreeing to not use nuclear information against signatories of the agreement is a mechanism to ensure the survival of the state and eliminate threat from allies. This principle is at the core of both the NPT and US NPR.

Thirdly, there was agreement that any actual dissemination of information would have to be agreed upon by both parties (Quebec Agreement, 1943). Arguably, this is the first mention of ‘sharing of nuclear technologies’ with others. The Agreement itself is proof of sharing of nuclear technology – tube alloys, an enrichment component.
This is the third pillar of NPT and US NPR. The significance of mentioning the Quebec Agreement and its key factor - non-proliferation, is to illustrate the strategic and policy significance of it to American nuclear policy formulation. As early as 1943, prior to commencement of work towards full-scale nuclearization, US already had a policy of non-proliferation established at some level with agreed upon rules of engagement. Suffice it to say, that over the past 60+ years, the nuclear policy of the US is based upon the same fundamental pillar of non-proliferation that have been narrowly modified to reflect the changing reality of IR. Internationally, these tenants have been codified into the NPT and further serve the interest of nuclear-have states, especially America.

The only pillar not explicitly mentioned in the NPT but mentioned in the US NPR is that of prevention of terrorism. This pillar has an entire section dedicated to it in the 2010 NPR. However, it can be argued that collectively, the three pillars of NPT work towards prevention of terrorism. It is ostensible that by controlling proliferation, engaging in disarmament and sharing peaceful technologies only with trusted partners and signatories, that prevention of terrorism is implicitly addressed.

NPT and failure to address non-proliferation:

NPT and American policy efforts towards global non-proliferation have been mediocre at best. To understand the failure of
non-proliferation at the global scale, Rational Choice Theory (RCT) offers a valuable framework of study. RCT provides a decision-making approach that stems from the assumption that various actors act in competitive situations with rationality. Each actor will try to maximize gains and minimize losses based on a cost-benefit analysis. When conditions of uncertainty and incomplete information persist, the actors will rationally engage in a cost-benefit analysis, allowing them to rank order policies with the pros and cons of each policy thoroughly analyzed.

The impact of RCT on American and IAEA nuclear policies can be analyzed by looking at the actor’s rationale to co-operate or defect. For non-proliferation to work, actors are required to co-operate with each other. In stark contrast however, if actors defect, both actors lose significantly and proliferation occurs. In a situation where some actors defect and some co-operate – the non co-operating actors will cause proliferation and nuclearize and co-operating actors will loose significantly by not nuclearizing. Rationality playing out like this is also known as prisoner’s dilemma. This rationality inevitably leads to a ‘competitive spiral’, which causes deadlock in negotiations and bargaining at the IAEA.

Prevalence of the competitive spiral is evident in attracting new members to the nuclear club, slowly perhaps, but nevertheless
continually (Gilinsky, 2010). The primary cause for non-proliferation related treaties to address the continuous addition in members of the nuclear club could be attributed to this framework to some extent. This concern was briefly noted in the NPR 2010 under prevention of nuclear proliferation and nuclear terrorism. Acknowledgement of its existence displays American understanding of the concept but a lack of will to tackle it. Recognizing this, previous IAEA Director General Mohamed ElBaradei, in 2009 stated that the “five main nuclear-weapon states have not taken seriously their NPT obligation to work for nuclear disarmament” (Mohamed ElBaradei, 2009). “Instead, they have insisted that nuclear weapons are essential for their security and continued to modernize their nuclear arsenals. This naturally robs them of the moral authority to persuade others not to acquire nuclear weapons” (Mohamed ElBaradei, 2009). Obama has sought to champion and reaffirm this understanding by stating his willingness to undertake the ‘grand bargain’ underpinning the NPT through its own actions. Nevertheless, no policy discussion on how this competitive spiral will be tackled has occurred. This contributes to the schizophrenic nature of American policy.

US Energy Secretary Mr. Chu asserted that: “IAEA sits at the nexus of two great challenges: helping a rapidly developing world unlock the promise of low-carbon electricity and stopping the spread of nuclear weapons as we work to realize the peace and security of a
world without them” (IAEA, Sept. 2010). Speaking towards global energy needs, Secretary Chu is referring to the role of disarmament, a key de-jure and de-facto factor in global nuclear policy alongside non-proliferation. This is because it is impossible to speak to matters of nuclear energy without addressing its potential military applicability. It further highlights the contradictory nature of IAEA’s mandate.

Under NPT, “all state parties agree to full exchanges of equipment, materials and scientific and technological information for peaceful uses of nuclear energy” (DFAIT – NPT, 2010). These peaceful uses include co-operation for “nuclear energy, medical diagnostics and treatments and power production” (ibid). The sharing of technology for peaceful use is de-facto proliferation. Iran serves as a good case study of the dual nature of nuclear policies of NPT. Iran identifies electricity generation and fuel for medical reactors as one of the reasons for developing a nuclear program (Cohen, 2011). It claims that it is simply exercising its inalienable right to nuclear technology for peaceful purposes. The pursuit of peaceful use of nuclear energy is codified under Article IV of the NPT as an inalienable right. IAEA itself asserts that it has “managed to amass over a thousand pages of documents, showing research, development and testing activities on a range of technologies that would only be useful in designing a nuclear weapon” (Cohen, 2011). Clearly the sharing of technology for peaceful purposes then leads to proliferation with unintended consequences.
As a bargain in attaining technologies for peaceful use, non-nuclear states agree not to import, build or acquire nuclear weapons or explosive devices; and similarly, nuclear states are obliged not to transfer any nuclear weapons or explosive devices to non-nuclear states (non-proliferation) (DFAIT – NPT, 2010). The easy transferability of the same technology from civil/peaceful use to military/non-peaceful use compromises the entire NPT system. Furthermore, NPT assumes open and honest communication between all states in this matter. It mandates all parties "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control" (DFAIT – NPT, 2010). The central premise of NPT is admirable and in theory may work well. However, pragmatically looking at its policies, it is apparent that it is destined for failure unless the dual nature of its policies is addressed.

Regardless of the practical (containment and sharing of technology) and legal (what can or can not be shared) problems of the NPT, it should be noted that “without [the treaty] there would not exist the obligation that non-nuclear-weapon states party to the NPT place the entirety of their nuclear programmes under IAEA safeguards. And, it is only in the context of the NPT that the five recognized nuclear-weapon states are legally bound to pursue and achieve nuclear
disarmament” (Mohamed ElBaradei, 2005). Obama’s landmark speech in Prague was in line with NPT when he committed to work towards disarmament by stating that “US will reduce the role of nuclear weapons in [its] national security strategy, and urge others to do the same ... [To this end, US] will begin the work of reducing [its] arsenal” (Obama, 2009). The above discussion serves to isolate deterrence, non-proliferation and disarmament as key factors of both US and NPT nuclear policies.

**Key Factors Influencing Nuclear Policy:**

**Neo-realism, Anarchy and Complexity:**

Neo-realism, as one of the main International Relations (IR) theories offers a framework within which the current schizophrenic nature of American nuclear policy can be explained. Under neo-realism, the anarchic IR arena has no formal central authority and remains largely decentralized. Anarchy in this sense refers to the fact that “the interactions of international actors are not constrained by a more powerful force” (Kissane, 2006). Without any constraints, the international policy arena is composed of formally institutionalized equal sovereign states. Sovereignty then gives IR arena a horizontal structure. Despite being equals in sovereignty, states still have varying degrees of influence and control due to power politics. The anarchic IR system also does not imply ‘disorder’ as a central necessity in spite of of being disorderly. Anarchy lies within a lack of
rules governing the interactions of international actors and not the actions of actors per se. Under such a system, states as rational actors seeking their own interest and power as main motivators, will be very careful in policy formulation. By extension, policy formulation dealing with nuclear issues will demand more careful rational attention due to the significance of nuclear technology (see section titled: American Security & Nuclear Policy for significance of nuclear technology).

The thinking behind the Quadrennial Defense Review (QDR) and NPR originally comes from the realist mindset of IR theory. Our world is better characterized as anarchic instead of orderly with a core assumption being that unitary actors are rational and make decisions to increase absolute and relative power. Relative power is the perceived amount of power one state has in relation to another state, whereas absolute power is the total effect of a state action on another state. The need to update classic realism was first felt by the founding father of Neo-realism, Kenneth Waltz. In 1979, he took note of international governance structures and its applicability to classic realism, coining the terms structural realism or neo-realism.

Neo-realism’s objective as an IR theory is to reformulate and update classical realist theory with states remaining a significant unit of analysis. Increasingly, however, the states operate within another level of analysis - international governance models and structures - that are supra-state and affect state behavior externally. International
structure is then defined as this additional level of analysis, which is believed to have constraints and explain state behavior as well as affect outcomes in IR. The motivations of the rational actors in an anarchic structural and institutionalized system need to be studied further as one factor in the nuclear policy formulation (see section titled: *Deterrence*).

The anarchic characteristic of the world is represented in Chaos theory, one application of which concerns itself with the studies of IR (Plaza and Régis, 2006). Chaos theory instructs that instability and disorder are widespread in nature and are essential to the evolution of complexity (Kiel and Elliott, 1997). To see the complexity of the modern day Westphalia system of 190+ states, an inherent paradox in achieving order and stability is evident. Both, American nuclear policy and NPT work towards achieving order by creating stability. Sustaining peace through stability in a complex world is a paradox because a complex world by definition is unstable and disorderly. Much like the anarchic arena defined by neo-realists, it is unmistakable that the anarchic nature of IR is at the center of what leads to the complexity that we see in states.

It is necessary to have instability and disorder at some level to have complex states. The duality of policy exists when these complex states attempt to remove complexity by stabilizing and introducing order. The paradox arises due to a high number of independent and
sovereign states with varying levels of ‘soft’ and ‘hard’ power. Soft power here refers to the non-coercive influences that states exert through diplomacy, culture and framing. Whereas utilizing and leveraging military and economic strength, hard power refers to coercive means to influence the behavior, interests and priorities of political institutions (Nye, 2005). In unison, these powers are utilized by states to maximize aggregate power. Complexity is therefore further increased due to differing size of economies, available natural resources, political systems, ideologies and cultural considerations of each state.

**Peace through complexity in a neo-realist world:**

On the other hand, it has also been argued that peace is easier to achieve when international relations are complex and disorderly. Galtung’s 1985 article titled *Approaches to peace: peacekeeping, peacemaking and peace building* states as its central thesis that peace will “occur in states with high entropy”. Translated: increasing disorder, messiness, randomness and unpredictability will bring more peace than could occur in predictable and excessively ordered countries” (ibid, 2006). He argues, "when there is a high number of interactions between actors with an equally high number of diverse possibility being actualized, an overall stability is achieved" (Galtung, 1985). This is because “overall stability is achieved not by forcing order, but by following a ‘constantly chaotic motion, which displays an
overall stability”. As the ultimate goal of states in IR is to maintain security and preservation of the state, this “notion of stability and ordered randomness points the way to a new understanding of peace. [This allows us] to see the nature and society as inherently peaceful not because [it] is so orderly but, rather, because [it] is so laden with disorder” (ibid, 2006).

Two example of this complexity and disorder can be analyzed to explain this phenomenon: European Union (EU) and the Organization for Security and Co-operation in Europe (OSCE). On a daily basis, the region-based EU deals with a wide range of topics and issues. Despite issues being highly contested and discussed in twenty-three official languages, policies reflect the interests of all 27 members. Each member state has a rich, turbulent and proud political, economic and cultural history and it would appear unlikely that such a union of states would occur. The move towards increased co-operation for a common vision of security would therefore seem perplexing, yet it was successfully institutionalized after the Lisbon Treaty in 2009.

Past the continental system of the EU, OSCE is another larger example of stability achieved through co-operative measures in a complex and disorderly system. Originally, a forum for the East and West formed in the seventies, it looks at key security issues of terrorism, arms control, military reform, and policing (OSCE, 2010). The notion that the world order of nation states is anarchic is old and
engrained in the psyche of OSCE, yet the only real constraint on the power of its 56 member States is that of the Rules and Procedures that were outlined at the inception of the organization. As the world’s largest forum for defense and security, it would seem absurd that these rules are significant because the member states impose them onto themselves. In addition, member states monitor their compliance with the rules depending on their own national interpretations of it. As a consensus based organization, any single state is able to block and eliminate all discussion if it has an issue with the agenda. Despite the blatant structural issues of this organizational model, the OSCE continues to function as a forum of dialogue for 56 states making a strong case for peace through complexity.

**Lack of objective truths and trust under Neo-realism:**

Waltz’s emphasis on power suggests a cold world in which true motivations are never known and must be viewed as power-maximizing plays. “American behavior over the past century provides little evidence of self-restraint in the absence of countervailing power” leading to the fact that “concentrated power invites distrust because it is so easily misused” (Waltz, 2001). The ability of a state to use nuclear weapons as the ultimate power-maximizing tool adds to the significance and complexity of nuclear policy. One of the reasons why NPT and US nuclear policy is marred by distrust is due to the inability to verify the true motivations of actors. This environment
increases complexity by breeding minimal trust and thwarting efforts to co-operate. Incentive to not-cooperate, as discussed earlier vis-à-vis competitive spiral, takes on added significance in this environment exacerbating and further encouraging states to view actions of states as power plays.

Soviet-era Russia and arguably, modern Russia are examples of a state where the above argument gains significance. To illustrate this point, I will briefly use the recent example of the Russian moratorium regarding its obligations under the Treaty on Conventional Armed Forces in Europe (CFE). In December 2005 and April 2006, Romania and Bulgaria respectively signed agreements with the United States regarding use of military bases within their boundaries. Under the agreements, the American military forces would be allowed to operate out of four bases in each country. High-level military and civilian officials in both Romania and Bulgaria have asserted the significance of this military cooperation, as it would benefit the local economies, bi-lateral ties and encourage positive diplomatic relations. The increasingly complex security situation and the orientation of NATO towards the Middle East and North Africa were used as justification for these bases from the American perspective (Saffet Akkaya, 2009).

The Russian Federation however disagreed and considered this eastward expansion of the American military a violation of the original treaty designed to keep military operations in line. Russia views this
increase in activity in the region as contributing to instability in the region. This is because the treaty originally set strict limits on the members of the Warsaw Pact and NATO in terms of the number of offensive weapons - battle tanks, combat aircraft, and heavy artillery that could be deployed in Europe (BBC, 2007). Russia further pushed for the adoption of “The Agreement on Adaptation of the Treaty on Conventional Armed Forces in Europe” (herein referred to as the adapted CFE-II). The CFE-II is a revision of the original treaty and was signed by some states at the Istanbul summit in November 1999 and sets national instead of bloc-based limits on conventional armed forces. The NATO states have not ratified it explicitly mentioning the expulsion of Russian troops from Georgian and Moldovan territories as a condition. Non-signatories assert that the Russian occupation is itself a violation of the original CFE. In contrast, Russia considers its troop withdrawal, a bilateral Russian-Georgian and Russia-Moldovan issue, not a NATO-Russia issue. The Russian perception of the American/NATO motivation is that of enforced control of Russia's sphere of influence. The manner with which states conduct themselves consequently highlights the distrustfulness of IR regardless of the policy's inclusion of nuclear weapons. Such a situation had arisen during the Cuban missile crisis and currently with Iran. Distrust in the nuclear policy arena is more prevalent due to higher stakes, and state's perspectives and their framing of policy issues is one factor in
the neo-realist disorderly sphere of IR.

**Schizophrenic Nature Explored:**

In addition to the dual natured policies of states presented in previous sections, the schizophrenic nature of stability and order needs to be elaborated as it pertains to nuclear policy. Firstly, the schizophrenic nature can be explained by looking at instruments of war. This is so due to the fact that states use their 'monopoly on violence' vis-à-vis their military power and war instruments to bring the very stability sought in the area of their interest. Instruments of war by their very existence promote instability and uncertainty in the complex and anarchic neorealist world order. Furthermore, they are at the core of international security arrangements such as The Collective Security Treaty Organization (CSTO), North Atlantic Treaty Organization (NATO), and major military agreements such as the Treaty on Conventional Armed Forces in Europe (CFE).

Military actions of one state inevitably, and usually instantly lead to regional and global insecurity. Measures to balance off the initial action(s) can be seen in a wave of counter actions. The dissolution of the Warsaw Pact in 1991 is a good example of this phenomenon. As NATO presence was large and significant at the time of dissolution, a security vacuum was created. To fill this void, the groundwork for CSTO was laid out in 1992 within a year of dissolution. CSTO’s charter was signed in Tashkent in 2002 with its
headquarters set in Moscow. A counter body to NATO for the Asian block countries was fully operationalized within a decade. It would be naive to say that CSTO is an organization of similar caliber to NATO. However, it is ipso facto, a collective security body created to address the regional insecurity caused by NATO.

The institutionalization or need to formally introduce such a structure to collective security is congruent with the theory of neo-realism in IR. Forming CSTO with a similar international structure to NATO was done to balance off regional power. Rational actors of the former Warsaw Pact saw the security vacuum as a change in power structure and immediately followed suit to counter the perceived power vacuum.

Secondly, the schizophrenic nature of the American policy is obvious when analyzing the NPR. The NPR contains an overall strategic objective of “reducing the number of nuclear weapons and their role in U.S national security strategy” (NPR, 2010). Similarly, another key objective is to ensure that “as long as nuclear weapons exist, the US will maintain a safe, secure and effective arsenal (ibid). Such conflicting objectives will have a schizophrenic effect because of the obvious catch-22 involved. Maintaining both policies will never lead to a fruitful result, as a predicament where maintenance of a few warheads is justified with the existence of nuclear weapons will inevitably materialize. In parallel to this, US will simultaneously
demand other states to eliminate their nuclear weapons. Under these policies, a state pursuing deterrence will inevitably rise to counter American possession of a few nuclear warheads to address the power vacuum. In a neo-realist world order with minimal trust, no state will ever be willing to eliminate its own arsenal entirely without American eradication of its arsenal. The fact that these two conflicting objectives are cited in the same document is evident of the American understanding of the conflicting NPR objectives.

Thirdly, under the current uni-polar world order, the situation is increasingly complex due to the lack of a single opposing entity. This translates into multiple smaller entities collectively trying to balance off US superpower status. American possession of a single large nuclear complex will inevitably face multiple smaller nuclear complexes equivalent to its own. The objective of a world without nuclear weapons will be harder to accomplish due to multiple actors possessing nuclear warheads, compounding the risks of proliferation and meaningful dialogue. The existence of smaller entities will raise the number of participants in the nuclear non-proliferation debate and that is why “there is much more reason to call the American arsenal a "prolifarant" than to call it a deterrent” (Schell, 2000). Due to the existence of a nuclear super power, a global insecurity is felt leading to amplified nuclear proliferation at an increased rate. The
proliferation caused by US arsenal then has a negative side effect and directly opposes the goals of US and NPT nuclear policies.

Lastly, there is strong reason to call the American NPR schizophrenic due to its guaranteed support to allies and partners. Creating regional stability by extending protection and having allies is positive. However, the inclusion of an ever-increasing list of allies and partners has its set of drawbacks. Nuclear policy when extended in this manner broadens protection and offers deterrence to partners under NPT by redefining the ‘border’. Under NPT, non-nuclear states agree to forgo efforts to attain nuclear weapons based on a reasonable expectation of deterrence provided by allies (Tyler, 2008). This arrangement encompasses the interests and borders of allies. The risk of proliferation however is high under this arrangement as “it is fantasy to believe thousands of miles of U.S. borders -- not to mention the borders of U.S. allies -- can be sealed” (Levi, 2008). Neo-realist thought would dictate American policy’s primary focus as security of itself. America should only look at the security of the world as a priority after ensuring the security of its own borders (Reichwein and Morgenthau, 2007). However, when neo-realism is considered, along with the complex international order, the concept of relative power comes into play. America calculates the costs of providing protection to allies under bi-lateral and NPT commitments as lower than allowing everyone equivalent opportunity to develop nuclear capability.
Therefore, it increases its guarantees and extends its deterrence borders significantly. The protection of these borders is a daunting task that is destined to fail in the long run, leaving gaps for nuclear proliferation actors to exploit its vulnerabilities.

**Deterrence and Strategic Stability**

Deterrence warrants an elaboration due to its significance as a central factor in the evolution of all state-level nuclear policies. Deterrence can trace its roots back as early as the advent of nuclear weapons. In 1949, “with the American use of two nuclear weapons and the Soviet development of a nuclear bomb, the nuclear war strategy changed to battle avoidance also known as deterrence” (Tyler, 2008). “The fundamentals of nuclear deterrence have changed little since then” (Durr, 2002). At its core, the goal of deterrence is to influence an adversary's thoughts and actions with the caveat that it can only work if the adversary chooses to be deterred (ibid, 2002). For a successful deterrence strategy to exist, there must be a component of physical and psychological capability (ibid, 2002). This fact is well documented as academic journals discussing deterrence are prominently featured in both psychological and military journals. Furthermore, the capability of the deterring party “has to be able to convey to the deterree that it is both *physically capable* and *willing* to attack if needed” (Durr, 2002). The USSR and US, both possessed these attributes in the 1950s, at the beginning of US nuclear policy.
formulation.

Deterrence's duality and evolution in American policy:

American NPR’s main position at the time of inception, when it was formally started in 1993 was deterrence and strategic leverage (DoD, 1995). In 1995, the U.S. National Security Strategy stated that "America will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with similar access from acting against American interests and to convince it that seeking a nuclear advantage would be futile" (Annual Report to the President and the Congress by the Secretary of Defense, 1995). The report emphasizes deterrence as a central policy by stating that Americans “will continue to maintain nuclear forces of sufficient size and capability to hold at risk a broad range of assets valued by such (hostile) political and military leaders" (ibid, 1995). Deterrence has therefore been central to the evolution of US policy in the mid 90s and as of 2010, the NPR has again been underpinned by deterrence. In 2010, NPR recognized the centrality of deterrence, however the challenge has been identified as different due to far fewer nuclear weapons being needed to meet the traditional deterrence goals (p.45, NPR).

Authors like Alexander Gralnick, as early as 1988, commented that American policy was based on the notion that nations must defend themselves not from ‘likely’ attack but from any ‘possible’ one, and, therefore even minimal trust is banished from peace
negotiations” (Gralnick, 1988). To pursue such a policy meant that inherent within it is overall system wide disorder, much like the one highlighted in the section titled: Neo-realism, Anarchy and Complexity. “The basic philosophy of American deterrence policy is that in no way can or should it trust its adversary” (ibid, 1988). This element of distrust goes back to rational choice theory, which eventually plays itself out with the policy outcome resulting in an aggregate increase in nuclear warheads. The increase in size and efficiency of US nuclear arsenals is counterproductive to the goals of non-proliferation and international stability, yet they remain an essential part of American military due to their ability, and perceived ability, to deter potential adversaries. During the cold war, this path lead itself to the doctrine of guaranteed mutually assured destruction (MAD).

“During the cold war, many scholars and policy analysts believed that MAD made the world relatively stable and peaceful because it induced great caution in international politics, discouraged the use of nuclear threats to resolve disputes, and generally restrained the superpowers’ behavior” (Lieber and Press, 2006). In opposition to this prevailing view of deterrence, it has also been argued that it is a weak policy and should be avoided. During President Regan's administration, the US “specifically rejected the belief that deterrence must rest on the threat to destroy a certain high percentage of the soviet population” (i.e MAD) (Sagan, 1989). The policy shift took place
when it was observed that having nuclear weapons aimed at centers in the USSR did not prevent the Soviets from invading Afghanistan or pursuing their strategic political agenda in Africa (Jervis, 2002). “Proponents of Reagan’s anti-MAD policies credited them with helping to bring down the Soviet empire. Even those who disagreed had little reason to resurrect MAD in the aftermath of the cold war” (ibid, 2002). Reagan understood the logic of MAD as valid but fundamentally flawed. His understanding is echoed well with the analogy that having nuclear weapons to deter an enemy “is like a double-barreled gun with one barrel pointed backwards at oneself, for an exchange of such weapons is equivalent to mutual suicide” (Gralnick, 1988). This is another way of explaining the schizophrenic nature of nuclear policies in the realm of deterrence.

The only policy evident with MAD was that having nuclear weapons is an effective deterrent with some states and only in certain instances. Its effectiveness is contingent upon how dependent the state is on its own nuclear capacity. A state with similar nuclear capacity is not deterred, as seen in the case of Russia pursuing its policies in Afghanistan. A nuclear action on a state with similar nuclear capacity is also not optimal, as MAD will guarantee an equally devastating outcome for the initiating state. However, deterrence against a state of unequal nuclear capacity is worth pursuing due to the uneven power dynamics and the certainty with which the nuclear
dominant side is able to utilize hard power. This difference in policy outcome is evident in US’ two-pronged approach to nuclear policy.

**Two-pronged nuclear policy:**

The American nuclear policy does not look at deterrence as a sole policy option. After Regan’s administration, it continued to use cold war terminology to refer to its global nuclear objectives despite the decrease in reliance on deterrence as a nuclear strategy. The two-pronged approach outlines US preference of using deterrence with alliance powers and strategic stability with non-alliance members. ‘Alliance relationships’ with states such as Canada and UK, form an important element of the US security strategy. These states share common values and worldview and tend to have an industrialized economic base, institutional and civil structure, and be liberal democracies. They form a stable alliance with US and work with it in the nuclear arena. “Through forward basing and power projection capabilities, U.S. military presence overseas (including nuclear capabilities) help promote regional stability, avert crises, and deter war” (DoD – Office of the Executive Secretary, 1995). This military presence overseas is in co-operation with alliance states, allowing them to forego holding nuclear stockpiles and engaging in heavy investments in nuclear research. This is one form of deterrence that only works in co-operation with alliance states. Initially designed to
move away from cold war mentality, the 1995 NPR explains this alliance-based relationship well:

"In recent years, there has been a dramatic reduction in both the overall size of the U.S. military presence abroad and in the nuclear capabilities deployed overseas. Yet maintaining U.S. nuclear commitments with NATO, and retaining the ability to deploy nuclear capabilities to meet regional contingencies, continues to be an important means for deterring aggression, protecting and promoting U.S. interests, reassuring allies, and preventing proliferation. Although nuclear capabilities are now a far smaller part of the routine US international presence, they remain an important element in the array of military capabilities that US can bring to bear, either independently or in concert with allies to deter war, or should deterrence fail, to defeat aggression. Thus, the US continues to extend deterrence to its allies and friends". (NPR, 2005)

In addition to this, strategic stability is the preferred policy with non-alliance states. When ample deterrence is present, it serves to ensure strategic stability. 2010 NPR highlights the role of strategic stability and its interconnectedness with deterrence when it states that both Russia and U.S possess enough nuclear weapons to ensure stable deterrence (NPR, 2010). Going forward, America is making certain that strategic stability is maintained through deterrence. The new policy direction of “no new nuclear warhead development” was supplemented with “a sound stockpile management program to extend the life of current U.S nuclear weapons” (NPR 2010). The nuclear comparability and the American posture are thusly maintained with no significant changes. In fact, 2010 NPR overtly states this under the subheading titled: “maintaining strategic deterrence and stability at
reduced nuclear force levels”. Reflecting on rational choice theory, it is self-evident that such a policy is to be pursued to maintain balance of power. Rationally, strategic stability and deterrence needs are critical and must be met, because not meeting them will equate to putting oneself in a disadvantageous position.

Strategic stability is also behind the strategy to deter China from feeling the need to build up stockpiles matching U.S numbers. Recognizing the current small stockpile of Chinese weapons, the 2010 NPR proactively dedicates significant effort in ensuring China is engaged in dialogue and works towards increasing its transparency of nuclear ambitions. This is done proactively to ensure international and regional security and to demonstrate US awareness of Chinese ambitions. Engaging China early displays US insistence in ensuring that a cold war style arms race does not take place again. The need to reinforce strategic stability with China through “seeking high-level dialogues with them to promote a more stable and transparent strategic relationships” (DoD, 2010) is reflective of the principle of strategic stability.

Two-pronged nuclear policy and its reliance on deterrence and strategic stability is therefore a useful factor in understanding American policy. Role of deterrence in US’s nuclear policy is not as straightforward as presented above. “There are too many uncertainties in the functioning of deterrence for confidence in claims
that any particular number or types of strategic forces will deter predictably” (Payne, 2009). The issue of the perfect threshold required to convince potential adversaries of the physical capability and willingness to use weapons is just one obvious one. That is to say, “answering the question ‘how much is enough to deter’ even when done with rigor, involves speculation and a myriad of unavoidable uncertainties” (Payne, 2009). This triggers an adversarial distrustful mindset. The earlier example of the American missile defense system being based in Poland and Czech Republic and Russia’s withdrawal from CFE due to American access to Romanian and Bulgarian military bases, showcases this point well. United States asserts that having access to these military bases is in the collective interest of American and European states. It further affirms that it will contribute to overall stability in the region. In contrast, Russia views granting of access as an encroachment to its interests and therefore a shift in its own abilities to deter American interests in its backyard. The diplomatic fall-out as a result of this is a testament to the difficulty of assessing an adequate level of deterrence.

Over the past fifty years, US’ worldview of the significance of deterrence and the idea of what deterrence actually entails has changed and the new nuclear strategy has been modified to incorporate the realities of a changing international environment. The addition of pillar #4 “Prevention of terrorism” to the nuclear strategy
through containment and safeguards against ‘rogue’ states and terrorist threats to U.S interests is a sign of this adoption; yet deterrence is still the de facto raison d’être of the U.S. nuclear posture. “Thus, the United States will continue to threaten retaliation, including nuclear retaliation, in order to deter aggression against the United States, U.S. forces, and U.S. allies” (Annual Report to the President and the Congress by the Secretary of Defense, 1995).

It is not always clear and warrants mentioning that the concept of deterrence is not limited to nuclear deterrence. Nuclear deterrence is one aspect of deterrence and is extended to general military and chemical and biological weapons (CBW). NPR 2010 states unmistakably that a plethora of states continue to pursue and possess CBWs and the US has given up its CBW arsenal pursuant to international treaties. “Due to this unilateral action, United States also reserves the right to employ nuclear weapons to deter CBW attacks on itself and its allies” (NPR, 2010). The use of nuclear weapons as a tool to deter and maintain strategic stability is therefore evident in this policy. Hence, healthy weight must be given to deterrence when examining the nuclear policy formulation process and discussing potential future policy options. NPR, looking at a longer time frame clarifies that the “US is not prepared at the present time to adopt a universal policy that deterring nuclear attack is the sole purpose of nuclear weapons, but will work to establish conditions under which
such a policy could be safely adopted” (NPR 2010). This sufficiently explains the centrality of deterrence while establishing the significance of the last major characteristic of the US nuclear policy, disarmament and non-proliferation.

**Disarmament and Proliferation**

Much like deterrence, arms control and disarmament are not new to American nuclear policy. They find their origins as far back as the creation of the first nuclear bomb. The policy of arms control and disarmament got its first considerations in US soon after the idea of non-proliferation took hold as President Truman viewed the bombs of Nagasaki and Hiroshima as weapons of terror (Sagan, p.14). The weapons were not suitable for military use as it could be used to wipe out innocent women, children and civilians as a serious cause for concern (Sagan, p.14). In addition to the moral argument, it is easy to see why a strategy of arms control and disarmament is better than having a world with more and more states joining the ranks of nuclear states working on principles of deterrence and MAD. It can be said that it was only a matter of time before arms control would have made it to the US policy agenda alongside non-proliferation.

**Evolution of the schizophrenic disarmament and proliferation policy**

As soon as nuclear arms control was added to the US agenda, experts observed that arms control is just another “way of avoiding a
fateful choice [between] a world of uncontrolled proliferation and a world with no nuclear weapons at all” (Schell, 2000 and Deutch, 2005). This global sentiment is clear when looking at the Treaty on the Non-Proliferation of Nuclear Weapons’ (herein referred to as NPT) Article VI’s objective of pursuing good faith negotiations towards complete disarmament. It is the opinion of many that Article VI’s objective is obsolete and the goal of no nuclear weapons is simply “a goal that the United States has no intention of pursuing” (Deutch, 2005). “It raises a basic hypocrisy on the part of nuclear powers [because] they retain their own arsenals while denying others the same right” (Deutch, 2005). US has played with the idea of disarmament and arms control for a while by suggesting various approaches to dealing with the nuclear issue. “Comprehensive Test Ban Treaty by President Kennedy marked the last time that the U.S. government took nuclear disarmament seriously enough to explore how to make it feasible” (Perkovich and Lefever, 2000). “Under Kennedy, nuclear weapons declined in importance among national security resources, in keeping with the policy of flexible response” (Nash, 1994). Flexible response was the defense strategy that brought up the idea of war across all spectrums, not limited to nuclear. It is a testament in itself that defense institutions considered war across other spectrums and did not exclusively devote all energy to nuclear. It was part of this flexible response strategy that the US was to
develop capacity to fight two simultaneous wars while being engaged in a small low intensity conflict (for further reading: two-and-a-half war doctrine). The US reluctance to order the resumption of nuclear testing after the Soviet tests is evidence of this policy position in 1961. US nuclear policy after that focused on vigorously pursuing and achieving a comprehensive ban through negotiations (Nash, 1994). Unfortunately, only a limited test ban was negotiated during Kennedy’s tenure and it was 1992 before the U.S conducted its last nuclear test, following USSR’s last test in 1990. Under Nixon’s administration, Strategic Arms Limitation Treaty (SALT) was pursued in a bilateral forum for armament control. SALT I led to an agreement in 1979 and SALT II was unsuccessful with the U.S withdrawing in 1979. The push towards disarmament or armament control has therefore not always been pursued through international institutions (i.e IAEA and NPT), but indirectly through spent resources on other military and defense sections (methods of war) and bilateral agreements.

No time frame was set for disarmament negotiations at the drafting of NPT. 40 years later, despite the end of the cold war, all five original ‘nuclear-have’ nations maintain an arsenal (Tyler, 2008). The resultant uncertainty caused by this drives the US to not engaging in heavy arms reduction (Durr, 2002). The NPR reflects this very well as despite a 20% reduction from the previous cap (1,550 warheads cap
for Russia and US), US has submitted proposals “for a new class of nuclear submarines, new nuclear-capable bomber and fighter aircraft, and updated nuclear bombs, warheads, and missiles” (Lieber and Press, 2011). “The price tag for this nuclear overhaul is estimated at $185 billion over the coming decade” (ibid, 2011). This is done to ensure that the nuclear capability remains the same despite a reduction in overall nuclear warheads. It is this duality that makes the issue of arms reduction complex.

A major US policy shift in the nuclear realm is evident in Reagan’s speech of March 1983 when unbeknownst to the US bureaucratic machinery, he proposed the Strategic Defense Initiative (SDI or ‘Star Wars’). It was in line with Truman’s views, as Ronald Reagan also had a “long standing and visceral hatred for nuclear weapons and the idea of MAD, which accepted cold war stalemate” (Herring, 2008). Under SDI, the idea of nuclear disarmament was abandoned and an emphasis was placed on defense against nuclear attack. In 1983, the idea of arms control was not being discussed at all for the first time in years after US deployment of intermediate range missiles across Europe (Herring, 2008). In fact, the notion of arms control or reduction was so outlandish that “only a fool would have predicted that within five years (from 1983) the two cold war combatants would be negotiating major arms reduction agreements
and within ten years the epic struggle would have ended” (Herring, 2008).

Even when disarmament was considered, the idea of arms reduction instead of elimination was always preferred. This was evident in the US-Soviet Strategic Arms Reduction Talks (START) (Herring, 2008). The effect of these talks has been to reduce nuclear arsenal size incrementally (a success in its own right). However, the fact remains that despite reductions in nuclear arms, the strategic policy has remained stuck in the cold war style ‘us vs. them’ mentality. US has insisted on paying lip service to full nuclear disarmament and has not taken any measures to reduce the arsenal to the point where it promotes co-operation. The NPR reflects this reality and highlights deterrence, instead of disarmament and non-proliferation, as a central part of American strategy. Because of the duality seen in stated intentions on one side and reluctance to complete elimination of nuclear arsenals, on the other - most analysts agree that “there is much more reason to call the American arsenal a "prolifarant" than a deterrent” (Schell, 2000).

The constant flux within the US military and defense establishments, along with the executive’s unique approaches to arms control is mentioned to outline the level of uncertainty and the constantly shifting nuclear policy environment. Arguably, uncertainty
and changing policy environment within America is the contributing factor leading to peaceful nuclear stability. A lack of a single major actor’s ability to dominate the policy discourse may also be the reason for the schizophrenic policies. This factor leads to a strong case to be made for American exceptionalism in nuclear policy.

Strong political discourse within the American psyche exists that believes in United States as a fundamentally different state from all others. This is due to American institutional makeup, its emergence from a revolution, and its constitutionally enshrined values of equality, liberty, peace and justice. These factors are believed to make America unique and can explain the lack of veneration for the international institutions and ‘order’. The international order is seen as limiting American ability to keep the world secure and peaceful through enforcement of global egalitarian values. Ernest Lefever, in his article ‘Reality vs Utopia’ makes a very strong case for American exceptionalism by stating that “in grave crises, the vital interests of the state always trump treaties, however solemn or multilateral they may be” (Lefever, 2000). He argues that “states, not international treaties are the primary actors in world politics” and “nuclear, like all technology, is morally and politically neutral, and derives its significance from how statesmen employ them”. He concludes with the fact that “for all their portent, nuclear arms have thus far served as instruments for peace” due primarily because they have been in the
hands of a peaceful broker - the United States. A similar chain of thought is at the bottom of the current US NPR towards non-proliferation, arms control and disarmament. The rhetoric of American exceptionalism is well documented in literature elsewhere and not discussed at length here. However, it remains a factor in understanding the schizophrenic nuclear policies

**Changing realities of disarmament and proliferation:**

To state that nuclear disarmament is the end goal and can be achieved through arms reduction is overly optimistic. US policy has worked towards nuclear arms control, defined as limitations on capabilities and size of arsenal, not on complete nuclear disarmament. This is because the ability to use nuclear capability to produce weapons as a threat and its use as a currency of power has worked towards eroding the common obligation of all states to pursue nuclear disarmament (Nuclear Age Peace Foundation, 2006). The principle of disarmament has been central to arguments of a nuclear-safe world and experts believe that any existence of nuclear warheads is significant enough to cause instability and therefore it is critical to disarm all states with nuclear arsenals. Not following this policy aggressively has led to the startling fact that nuclear arms control is faring worse in the first days of the twenty-first century than it did during the cold war (Schell, 2000). This is a policy that is increasingly
voiced in the American establishment since 9/11. It is argued that rogue states and terrorists, unlike the Soviet Union, China and Russia cannot be deterred or effectively contained and henceforth their nuclear arsenals must be eliminated entirely and swiftly (Perkovich, 2003). With this logic in mind, “Article VI of the nuclear Nonproliferation Treaty obliges the nuclear weapon states to negotiate in good faith towards nuclear disarmament”. As documented earlier, this provision is one of the three central pillars of the NPT and an important part of the nuclear negotiations and bargaining” (Arms Control Association, 2010). At the time of drafting, the NPT did not specify any timelines for disarmament or steps that need to be taken to complete this (Arms Control Association, 2010). One of the reasons for the failure to disarm is this open-ended obligation coupled with non-existent implementable steps.

Much of the voice for global nuclear disarmament from the US is influenced by fears of terrorism. The NPR 2010 has five key objectives, of which priority is given to the prevention of nuclear proliferation and nuclear terrorism. It has been noted that “unless today’s dangerous trends are arrested and reversed, before long we will be living in a world with [...] an increasing likelihood of terrorists getting their hands on nuclear weapons” (p.9, NPR 2010). From the time of the cold war where distrust was based on state actors, non-state actors now have taken up the traditional spot. These actors include fragile
and rogue states as well as groups who operate across political and state boundaries. With an increasing number of states seeking nuclear capabilities, it is recognized that sooner or later “US will find itself embroiled in conventional wars with nuclear-armed adversaries who will have powerful incentives to use nuclear weapons because their very lives, families, and survival of regimes would be at stake” (Lieber and Press, 2009). In volatile regions it will be significantly harder to prevent escalation and rely on soft power to yield results with nuclear-armed adversaries. It is therefore ideal for the US to pursue a policy of global nuclear disarmament and non-proliferation today.

**Conclusions**

It is critical to understand the factors of deterrence, non-proliferation, arms control, and disarmament to understand American nuclear policy in an anarchic international system. The factors contributing to American nuclear policy within this system are significant due to US possession of the largest nuclear arsenal. The neo-realist global system is complex and consists of equal sovereign states operating with rationality. In agreement with rational choice theory, sovereign entities try to maximize power and ensure their survival by making rational decisions based on a cost-benefit analysis of policies. America consequently has a nuclear policy that rationally attempts to balance competing domestic and international objectives.
These objectives are listed as: deterrence of potential attacks against itself and allies, elimination of nuclear proliferation, and ensuring global stability. These broad goals, in combination with the aforementioned factors, result in a schizophrenic policy, as can be seen in the American NPR amongst other policy documents.

State actors attempt to project hard and soft power over each other and through international organizations that endeavor to regulate the nuclear arena. America attempts to balance its neo-realist objectives while simultaneously trying to contribute to global stability. Working with the international structures of IAEA, UN and NPT, along with internal defense and security establishments, American nuclear policy becomes a mélange of competing objectives. Schizophrenia is apparent when US pushing global non-proliferation, simultaneously and inescapably engages in proliferation to satisfy its deterrence and strategic stability needs. Similarly, the trust required to work towards complete disarmament is compromised when US engages in maintaining nuclear weapons for itself and its partner’s deterrence needs. As expected, the lack of trust leads to retaliatory policies from rational state. These states engage in the self-interest of state survival based on the same underlying principle of deterrence and strategic stability. A gradual increase in nuclear-have states is consequently the result. Therefore, deterrence and strategic stability, while being the underlying reason for nuclearization, is ultimately
counterproductive to American and international policy goals of non-proliferation and disarmament. Similarly at the international level, enforcing a strict non-proliferation regime inevitably leads to violations of NPT due to its guarantee of nuclear technology to all states for peaceful use. The misuse of civilian nuclear technology and its transfer to military operations is unavoidable, as any rational actor will pursue such a policy course. Nuclear policies of Iran, Russia and China become apparent as they are left with little rational choice except to work towards increased nuclearization to sustain stable and strategic deterrence to match American power.

American nuclear policy is pursued in a complex IR arena. Complexity of international order exists owing to the lack of an enforceable supra-state authority. This creates a void for US, as a central power to enforce order, in an otherwise disorderly anarchic system. At their core, both American and IAEA policies work to achieve stability by creating order. Order in the international system is believed to lead to stability as its creation produces rules of engagement that foster co-operation. The United States therefore has a dual role: a state actor in the global system and an enforcer through international institutions. This causes American nuclear policy to be dual in nature. American national interests of strategic stability and deterrence overlap with American international interests of non-proliferation and disarmament. While the American policy within the
international system is working towards creating order and stability, American posture is working to meet its own national desire of deterrence and reassurance (NPR 2010). American policy therefore is always attempting to balance national and international goals, which lead to a schizophrenic policy.

By utilizing neo-realism and analyzing nuclear policy’s core factors of deterrence, strategic stability, non-proliferation, and disarmament - it becomes apparent why US nuclear policy is a moving target. In complementary use of Scott Sagan’s book titled: ‘Moving Target’ - the nuclear policy up to this point has, and will continue to be a moving target. Kissinger’s statement applies as much today as it did in the past: "Achieving a more discriminating nuclear strategy remains to this day one of the most difficult tasks to implement" (Perkovich and Lefever, pg1, 2000). Working towards a nuclear policy that does not account for the schizophrenic nature of US policies is therefore self-limiting and only offers short-term strategic direction.
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