

U.S. Nuclear Posture Review 2010 & 2018: A Comparative Study

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Abstract

The Trump administration has argued that contemporary international environment presents diverse threats to the national security of the United States. Keeping in view these strategic changes, President Trump in his 2018 Nuclear Review Posture (NPR) claimed qualitative and quantitative enhancement of his country's nuclear arsenals. Nuclear buildup and the confrontational policy of Washington will encourage a similar attitude in other capitals around the world. It will also question the political will behind non-proliferation and global nuclear disarmament. By comparing the 2018 NPR with that of 2010, this article describes changes in the US nuclear force structure, its nuclear strategies, and global commitments. The article also deliberates on the impact of President Trump's nuclear policy on the overall global strategic environment. The study is descriptive and analytical and covers three basic elements of research; description, exploration, and prescription. For this purpose, secondary sources like books, journal articles, newspaper articles, and accessible official websites have been utilized. The article concludes that the revised NPR will negatively impact the strategic stability of the international system.

Keywords: Nuclear Posture Review, Non-Proliferation, Great power rivalry, Arms race.

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1. Introduction

Before proceeding to discuss the Nuclear Review Postures of the Obama and Trump administrations, it is important to understand what American security strategy is, and what role nuclear weapons play in this strategy. National Security Strategy (NSS) is basically a document, highlighting threats to the national security of the US and the strategies adopted by the government for countering these threats. The document is produced by Washington on yearly bases and is presented to the congress. The document is based on the section 3 of Goldwater-Nichols Department of Defense Reorganization Act 1986. NSS covers multiple aspects of US security like its policies, objectives, global commitments, and interests. It also includes facets of American defense and military capabilities to implement these policies and to achieve stated objectives.ⁱ

American nuclear capabilities hold a central position in its security strategy as nuclear forces ensure its ultimate deterrence capabilities against potential aggressors, hence guaranteeing its national security. In the post-Cold War era, the US felt the need to define the role of nuclear weapons as a “bottom-up approach” to its conventional capabilities. Thus, Nuclear Posture Review (NPR) was approved by the US government in 1993, for assessing the role of nuclear weapons in its national securityⁱⁱ. The first-ever Nuclear Review Posture was given by President Clinton in 1994. It was a 6-page document titled, “Nuclear Forces; Post 1994”ⁱⁱⁱ. This document guides on six issue areas namely, global counter-proliferation, nuclear security, US nuclear force structure, posture, role of nuclear weapons in country’s security strategy, and normalization of relations with Russia.^{iv} The second Nuclear Review Posture report was presented to the Congress by the Bush administration in 2002. This report was not made public, but a portion of the report was leaked.^v In this document, the US aspires to have massive nuclear weapons reserve force and highly sophisticated arms buildup. For gaining this end, President Bush

abandoned Anti-Ballistic Missile (ABM) treaty. The 2002 NPR listed China, Iraq, Iran, Libya, Syria, and North Korea in the list of potential targets, along with Russia^{vi}.

The third inclusive manuscript regarding the nuclear strategy came in 2010 when Barak Obama was the president. Obama was seeking a ‘Nuclear Zero world’, but, at the same time, he was committed to sustain a safe, secure, and credible nuclear force since the world is not 100% free of these destructive weapons.^{vii} Key objectives in 2010 NRP were sustaining safe, secure, and effective nuclear arsenals; enhancing regional deterrence; ensuring deterrence stability with a reduced nuclear force; reducing the US reliance on nuclear weapons for its national security; and the prevention of nuclear terrorism and nuclear proliferation.^{viii} The fourth NPR was presented by the administration of Donald Trump in 2018. President Trump in his Nuclear Posture Review has presented the evolving international environment as threatening to the US security. This NPR stated that the capabilities of American enemies (China, Russia, and North Korea) are enhancing day by day, which is shifting the global strategic balance of power in the opposite direction. For countering this situation, the Trump administration suggested military modernization. A major focus of the 2018 NPR was enhancing nuclear capabilities and increasing the role of nuclear weapons in the security strategy of the US.^{ix} The current study is aimed at comparing the 2010 and the 2018 NPR in order to analyze the impact of both postures on the security and stability of the international system and global non-proliferation efforts.

2. Theoretical Framework

Realism is a dominant school of thought in international relations. According to this theory, international relations is characterized by conflict because states continue to compete with each other for maximization of power. For realists, states can pursue their self-interest and ensure their survival through continuous upgradation

of its military muscles. With the passage of time, international scholars especially Kenneth Waltz came up with some revisions in the realist thought. His thinking is commonly known as neo-realism or structural realism. For Kenneth Waltz, state policies are not the result of lustful nature of its leaders; rather the anarchic nature of the international system presses states to act in a specific way. For both realists and neo-realists, national interests are what states always seek, but their interpretation about the driving force behind this is different. For realists, this driving force is human nature while for neo-realists, it is the absence of a central authority in the international system. Neorealism has further subdivisions; defensive realism (emphasizing maximization of security) and offensive realism (emphasizing maximization of power).

The Neo-Realist theory of Kenneth Waltz and John Mearschiemer provides an apt lens to understand the nuclear policies of Obama and Trump. Some aspects of the 2010 NPR like the goal of global zero, negative security guarantees, and declassification of its nuclear policy, misguide readers towards liberal thinking. Instead of initiating the process of global zero from home, Obama was ready to maintain a credible nuclear force. On the other hand, Trump's nuclear policy is the manifestation of administrations' heightened threat perception vis-à-vis Russia and China. International structure in 2010 was such where the US did not have any threats to its power position. The US was confident of addressing differences with Russia and China through peaceful means. But in 2018, the international system altered due to the Russian role in Creamia (2014); China's growing influence in the international system; and the stability and growth of China's economy. The US was concerned more about maintaining its power position. The approach of both the policies (2010 AND 2018 NPR) towards global non-proliferation efforts also indicates the fact that there is no morality in the international system. The US always claims to be the champion of non-proliferation, but when it comes to homeland security and prestige, it does not hesitate to pursue aggressive modernization and upgradation of its

nuclear force. Trump unilaterally pulled itself out of the multilateral nuclear understanding with Iran and paid no heed to international obligation.^x

3. Obama's Nuclear Posture Review

President Obama submitted his administration's NPR to the congress in 2010. It was basically the third NPR in the US history. This document was basically the reflection of the President's vision, which he outlined in his 2009 speech at Prague. To exactly quote his words; "United States will search for the peace and security of world without nuclear weapons". At the same time, he maintained that as long as these weapons are there in the world, the US will maintain its nuclear arsenals for deterring its enemies and for ensuring the security of its homeland and allies.^{xi}

This document is aimed at thwarting threats of nuclear proliferation and nuclear terrorism, reducing the role of nuclear weapons in the national security strategy of the US, reducing the existing nuclear stockpiles of the US but maintaining a safe, secure, and effective nuclear arsenal for ensuring their deterrent value as well as ensuring nuclear guarantees to its allies. The 2010 NPR clearly states that the sole aim of nuclear weapons is to deter attack not only against the US but also its allies, and these will be utilized as a last resort.^{xii}

3.1. The 2010 NPR and Non-Nuclear Weapon States

The Obama administration claimed that it was committed to its negative security assurances (It is a commitment by the nuclear armed state that it will never use its nuclear weapons against a state which is not in possession of nuclear weapons). But this document claims that the US will not use or threaten to use its ultimate weapon against a state that is not only non-nuclear but also has excellent record of compliance with NPT. The manuscript added that if a non-nuclear weapon state with excellent non-proliferation record attacks the US or its allies with biological or chemical

weapons, the US will respond with conventional weapons instead of nuclear ones. Thus, the Obama administration changed the circumstances for the use of its nuclear weapons.^{xiii}

3.2. The 2010 NPR and Nuclear Weapon States

The Obama administration was more likely to opt for a diplomatic and political path in dealing with other nuclear capable states, especially China and Russia. It aspired a comprehensive dialogue with Russia and China over the ratification of the “New START Treaty”. Through this treaty, these countries can work towards a comprehensive reduction in their nuclear arsenals. The document also calls for the ratification of the Comprehensive Test Ban Treaty (CTBT). All these measures will improve Sino-America and Russia-America strategic relations, which will ultimately lead to global cooperation on nuclear issues, hence increase international peace and stability.^{xiv} This policy document rolls out the use of preventive and preemptive nuclear attacks against non-nuclear states, but it does not mention anything regarding preventive and preemptive nuclear strikes against nuclear-capable states.^{xv} The text does not directly mention the adaptation of the No-First Use (NFU) option; rather it indirectly hints at it by stating deterrence as the exclusive aim of its nuclear arsenals.^{xvi}

3.3. Nuclear Terrorism and Non-proliferation

The 2010 NPR mentioned nuclear terrorism and proliferation of nuclear weapon technology as the most prominent threat to the global strategic stability. Both issues are dealt with seriously by stating that the US will take strong action against states or non-state actors found guilty of assisting and sponsoring terrorism through any avenue or providing these groups with technology, formulas, or nuclear weapons themselves.^{xvii} For strengthening Nuclear Nonproliferation Treaty (NPT), the US showed its resolve to address issues of ‘non-compliance’, and stated that it supports the export and utilization of nuclear technology for peaceful purposes.^{xviii} The document states clearly that “Arms control and

disarmament measures and other ways of reducing the proliferation of nuclear weapons, can be a major contribution to American objectives of non-proliferation and nuclear terrorism”.^{xix}

3.4. The 2010 NPR and US Allies

The report is quite ambiguous as far as the role of the US regional allies is concerned. Although it vaguely mentions that its allies have an important role to play for deterring regional aggression, but it does not indicate the specific role conventional capabilities of these friends would play. Specifically for Europe, the document leaves questions about the role of its nuclear weapons in the region for further discussion to be done by NATO, and for the Pacific, it leaves details to be worked out at the Regional Defense Planning Forum^{xx}.

4. Trump’s Nuclear Posture Review

Starting with his presidential campaign, Donald Trump advocated qualitative and quantitative enhancement of the US nuclear capabilities. His NPR is a reflection of his pre-presidential aspirations. The NPR issued on January 27, 2018 has maintained the centrality of the nuclear weapons in maintaining homeland security as well as the security of the friends and allies of the US.^{xxi} This document also advocates a development in the US nuclear weapon technology by stating that despite a reduction in its nuclear force by the US, its adversaries (specifically Russia and China) are continuously enhancing their nuclear weapons, force structure, technology, and strategies.^{xxii} The major focus of Trump’s policy review is the return of the great power rivalry. The report argues that due to the US involvement in War on Terrorism, it has overlooked growing involvement of Russia and China in the international politics like the issue of Ukraine, Crimea, and ‘artificial islands’ in South China Sea.^{xxiii}

The 2018 NPR declared North Korea and Iran as potential threats and presented the speed of the North Korean nuclear program as a

grave concern for the US. As for as Iran's nuclear deal is concerned, the US shows uncertainty about its validity and reliability. In fact, within three months of the publication of this NPR, 'Iran's nuclear agreement' was nullified through the withdrawal of the US from it.^{xxiv} Some of the important features of the 2018 NPR are as follows:

a) Red Lines for the use of Nuclear Weapons

The 2018 NPR emphasizes the deterrent value of its nuclear weapons. The important thing in this respect is the increase in the number of circumstances in which nuclear weapons are supposed to be used. While listing red lines, the review mentions cyber, chemical, biological, nuclear, violent, and conventional offense by state or non-state actors over the territory, civilian population, nuclear, or military installations of the US or its allies. The Trump administration has supported the increase in the number, sophistication, and deployment of nuclear weapons; it has also advocated the proliferation of the circumstances under which these extreme weapons may be used.^{xxv}

b) Tactical Nuclear Weapons (TNWs)

The 2018 NPR has overemphasized the importance of TNWS by stating that long-range cruise missiles, IBM (Intercontinental Ballistic Missiles), and SLBM (submarine launched ballistic missiles) may not effectively deter the enemy because of their inflexibility. Reason of this prominence to TNWs is to communicate potential adversary that deployment of limited weapons against the US or it allies would be a dangerous endeavor.^{xxvi} Major cause of concern is the Russian possession of large number and diversity of TNWs and its first use (FU) policy of these limited range weapons while keeping the conflict at lower edge of spectrum (Russia named this policy as 'Escalating for de-escalation').^{xxvii} The situation became alarming in 2014 with Russian annexation of Crimea and its support to certain anti-state forces in Ukraine. This episode has alarmed the US that Russia can

utilize similar strategies against other neighbors including NATO allies of the US.^{xxviii} The report further suggests the expansion of the deployment sites and advocates the deployment of “*multi-role fighter jets*” and “*nuclear capable bombers*” at forward locations. Other than TNWs, nuclear capable submarines^{xxix} are another important source of flexible response for the US^{xxx}.

c) Extended Deterrence

The concept of extended deterrence evolved during the Cold War, with the US ensuring its allies with nuclear retaliation against any attack on their soil. Allies to which the US has extended such assurances include a number of states from the Pacific, Europe, and Asia. The 2018 NRP assured the US commitment to defending, deterring, and even defeating the enemy’s aggression (be it nuclear or non-nuclear).^{xxxi}

d) Nuclear Modernization

The major focus of the Trump administration is on qualitative and quantitative advancement of all the three legs (land, air, navy) of American nuclear capability and force structure. Review also talks about life expectancy of the US nuclear weapons, their renovation, and upgradation. This attitude by the US will force its opponents to go for reactive moves, which will further strain an already tense international environment.^{xxxii} This draft is being criticized by experts for its overt signaling of a nuclear arms race, which will increase instability and tensions internationally.

e) Arms Control

Trump’s nuclear review says little about arms control. It explicitly claims that the US is not going to ratify CTBT (Comprehensive Test Ban Treaty) unless other nuclear capable states do so. The CTBT is not ratified by any of the nuclear capable states.^{xxxiii} The report further states that the return of great power rivalry and the Russian breach of INF (Intermediate Range Nuclear Force) and its

military modernization efforts, made international environment non-conducive for arms reduction or arms limitation. In 2010, the US and Russia signed the “New START Treaty”, however, despite signing the agreement, Russia is not willing to negotiate any type of reduction in its tactical nuclear weapons as well as Inter-Continental Ballistic Missiles. Thus, the US opined that any further arms control measures are impossible unless Russia shows acceptance of existing agreements and treaties.^{xxxiv}

f) Non-Proliferation Commitments

The NPR mentioned NPT (Nuclear Non-Proliferation Treaty) as central to international counter-proliferation efforts. But previously discussed points reveal that practically the US itself is violating a number of NPT obligations. The US qualitative and quantitative upgradation of its nuclear arsenal, the extension of red lines, and aspiration for a flexible response, all show a revision of the US arms reduction and limitation efforts since the Cold War. Article VI of NPT talks about the reduction of nuclear stockpiles. The US via its military modernization is not only violating NPT but is also encouraging an arms buildup in rival states. Negotiations on FMCT (Fissile Material cut Off Treat) will also face a setback because conclusion of the treaty requires concentrated efforts by world powers. FMCT aims at reducing the production of highly enriched Uranium and Plutonium, which are the basic components of nuclear weapons. Successful conclusion of this international treaty will undermine efforts of nuclear upgradation, which is against the US interest in the contemporary strategic environment.^{xxxv} “Negative security assurance” is a very important principle of international strategic relations. According to this principle, nuclear weapons states assure non-nuclear states that they will never resort to the use of “extreme weapons” against them. The aim of this strategy is to discourage a nuclear weapon program in these states. Trump’s NPR is working against the spirit of negative security assurance by stating that “it will not use or threaten any non-nuclear state that is a signatory of NPT”.^{xxxvi}

International Reactions to the 2018 NPR

Russia is unhappy with the 2018 nuclear policy of the US. It rejects the US claims that its military modernization and lowered nuclear threshold is because of Russian nuclear buildup. Russia rejects this allegation and maintains that as far as the use of its nuclear weapons is concerned, its military doctrine clearly mentions two scenarios. First, it will use its weapons in response to nuclear, biological, and chemical attacks on its territory or against its allies. Second, it will resort to nuclear weapon use against a conventional attack only as a weapon of last resort. Russia is also concerned about American claims that the latter will use nuclear weapons under extreme circumstances. Russian policy makers say that the 2018 US NPR is quite ambiguous while mentioning scenarios for nuclear use. Thus, it is very dangerous regarding the principles of nuclear deterrence, and it will trigger a new arms race.^{xxxvii}

China is also critical of this document. Its ministry of National Defense reacted by stating that America should abandon its Cold-War mentality and must behave seriously in view of its global responsibility of non-proliferation and nuclear disarmament. Besides, it must understand Chinese strategic intentions with a view of its national defense. It further claims that presenting China as a determinant for its military modernization is just a lame excuse for adding to an already large pool of world nuclear arsenals.^{xxxviii}

Through its 2018 NPR the Trump administration aspires to modernize its strategic and non-strategic nuclear weapons including 150 installed in Europe. The US is planning to deploy these tactical nukes on F-35 fighter planes. But a number of European states are concerned about the political, economic, and security challenges which they will experience while hosting these weapons. The parliament of Netherland adopted a resolution that deters the procurement of nuclear capable F-35 jets. Germany has

officially opposed Trump's proposal of the development of new tactical nuclear weapon systems.^{xxxix}

5. Comparison and contrast of the 2010 and 2018 NPRs

Nuclear posture review is basically related to the role of nuclear weapons in the US national security. Until now Pentagon has issued four NPRs. All these documents differ from each other based on the priorities of the government in power. But a common thing in these reviews is that they all talk about the deterrent power of the US nuclear force, counter-proliferation, and the US allies (especially those who are granted extended deterrence). The 2018 NPR talks about all the above mentioned points, however, what is different is the way in which the current administration is responding to the international challenges for the preservation of national interests.

First, similarities between the 2010 and the 2018 NPR will be explored. Like the 2010 NPR, the 2018 one is also very comprehensive and detailed. Where Obama's report consisted of 49 pages, President Trump's report comprises of 75 pages. Each point is discussed thoroughly. Thus, it is a very transparent document. Like its predecessor Trump decided:

- To maintain nuclear triad (Surface, air, and naval nuclear capabilities)
- Upgrading of the US nuclear force
- Assured negative security guarantees to non-nuclear states
- Preserving the right of nuclear testing
- Enhancing extended deterrence and maintaining of high alert level for countering any aggressive moves against the US or its allies
- Recognized "arms control: as basic to the US national interests^{xl}

Even though the 2010 and the 2018 NPRs share the above, there are striking differences between the two that are explained below.

- While Obama was against the development of new weapon systems, Trump aspired nuclear-submarine-launched cruise missile capability. It also sought the development of low-yield nuclear weapons, whose aim is to show the enemy the retaliatory power of the US because currently the adversaries of the US believe that it will never have a moral ground to use its big deadly weapons. Truth is that the low-yield nuclear weapons have destructive powers equal to the bombs dropped at Japan during World War II (Feinberg, 2018). The 2018 review justifies the possession of TNWs on the grounds that Russia has a First Use (FU) policy for the use of small weapons. But the draft has consciously ignored to mention that the US is already having more than one thousand TNWs in its arsenal.^{xli}
- The Obama administration intelligently balanced international non-proliferation commitment and effective maintenance of the national nuclear force. But current administration is more concerned about the credibility of its nuclear force than arms control measures. Trump supported his quest for modernization on the grounds that the international environment is transforming drastically. The report mentioned heightened tensions between the US, Russia, China (nuclear giants) and threats from the nuclear programs of North Korea and Iran to the national security of the US. These are the developments which press the US to maintain the deterrent value of its weapons. International security analysts have criticized the 2018 report over its exaggeration of prevailing threats. They claim that after the “Zapad Exercises” of 1999, Russia has never planned the use of small nuclear weapons against the US or its NATO allies.^{xlii}

- There is no mention of the NFU principle in the 2018 NPR whereas the 2010 NPR option discussed this option in detail.
- The nuclear policy of Obama was aimed at sustaining a stable and secure international environment. On the other hand, Trump is focusing on competing with Russia and China and enhancing the role of nuclear weapons in national security policies.^{xliii}
- Unlike the 2010 review, the language of the 2018 review is very aggressive and blunt. For example, at one point it states: “We will have no choice but to destroy North Korea” and “I have a nuclear button but is bigger and powerful than his”.^{xliv}

American Nuclear Policy under Joe Biden

During his election campaign, Joe Biden claimed to review and revise the American nuclear policy. He considered the FU policy illogical and stated, “the sole purpose of American nuclear force must be deterrence or retaliation against attack”. As the vice-president of Barak Obama, Joe Biden had said that he and his president Obama are of the opinion that “nuclear weapons should only be meant for deterring and retaliating a nuclear strike ----- and we are confident that we can deter non-nuclear threats through other means”.^{xlv} Biden further claimed that unlike Trump, he is ready to play an active role in the global counter-proliferation and non-proliferation efforts.

Soon after assuming office, President Biden, unlike Trump, extended New START with Russia for a term of five years. Antony Blinken, the US Secretary of State, while addressing the media claimed that “START extension is just a first step towards our commitment to global security. America (after consultation with Congress and its allies) will utilize this time (5 years) to pursue Russia for comprehensive arms control measures that will address all nuclear weapons”.^{xlvi} This extension has regarded as a

major breakthrough in the global arms control efforts because through this, two major nuclear weapon states expressed their willingness to cooperate on nuclear issues and to reduce their stockpiles.

Another important deviation from Trump's policy was Biden's decision of joining the Joint Comprehensive Plan of Action (JCPOA). For a long time, Iran and the US are part of multilateral negotiations aimed at the restoration of the deal.^{xlvii} The success of Ebrahim Raisi, a fanatic, as the new Iranian President is considered by many as a major hurdle in the reinstallation of the P5+1 nuclear deal. But the Biden administration is hopeful that Ayatollah Ali Khamenei, the Iranian Supreme Leader, who played an important role during the 2015 nuclear deal, still holds office.^{xlviii} All these developments indicate the commitment of the new US government towards international arms control and non-proliferation efforts. But the fiscal budget 2022 allocated for National Nuclear Security Administration (NNSA) points out something else. The budget allocates a huge amount to the development and operationalization of new weapon systems as well as the upgradation of existing and outdated weapons.

Biden's fiscal 2022 NNSA budget also provides funds for upgrading warheads for the Air Force's new, nuclear long-range, stand-off air-launched cruise missile (W80-4); the Navy's Trident D5 SLBM (W88); the Air Force's new Ground Based Strategic Deterrent missile (W87-1), and the Navy's new SLBM (W93) for the new Columbia strategic submarine. There is also money for testing the newly refurbished warheads for currently deployed SLBMs (the W76); production of the B61-12; pre-production of the refurbished warhead in the Minuteman III (W78). 2022 Pentagon budget has \$27.7 billion for modernization of the land, sea and air systems that will deliver nuclear weapons. There

is \$5 billion for the new Columbia submarines; \$3 billion for the B-21 long-range strike bomber, \$2.6 billion for the new Ground Based Strategic Deterrent ICBM, and \$609 million for the long-range, stand-off air-launched cruise missile.^{xlix}

A review of Biden's nuclear policy reveals that the new US administration is relying on diplomatic channels for binding international community towards disarmament. On the other hand, it is also increasing its own capabilities. Although a proper policy is not there yet, the 2018 NPR is being reviewed.

6. Conclusion

There are a number of differences between Trump and Obama's Nuclear Review Posture documents both in terms of their tone and the policy options. Without directly criticizing the strategy of the previous government, the Trump administration states that due to changed international environment, the US needs to follow an assertive nuclear posture which is not in line with its international non-proliferation commitments. The US administration under Trump relied more on its military might especially its nuclear capabilities than on the political or diplomatic channels for achieving its global and regional objectives. The 2018 NPR presented China as a potential threat to the US global stature, therefore, the report advocates heavy arms buildup and upgradation of existing stockpiles. This modernization boost will trigger an arms race which will endanger global peace and harmony. The review has enhanced the possibilities of escalation by lowering the nuclear threshold, and, in this way, it has endangered world peace. Although Trump also continued some of the policies of the previous government, but, on the whole, his NPR adds to the international tensions and mistrust. As a global hegemon, the US is responsible for maintaining international peace and order, therefore, it must seek diplomatic and political means for addressing international problems and misunderstandings.

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End Notes

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