Studying the 2010 US Nuclear Posture Review: Ridding the World of Nuclear Weapons?

Bruce D. Larkin

We were taught, when I attended the College of the University of Chicago, that the path of a liberal education lay along the paving-stones of exceptional texts. Some were ‘original sources’. Others announced a scientific finding. Some were cultural icons. But the point was not to pray to these texts. Instead, this education cultivated meaning, criticism, and construction.

The modern citizen crafts a personal place in the polity in much the same way. Political society is understood through its texts, including exceptional texts. We learn to be citizens by criticizing the texts and practices of past and present, and we act as citizens, building the future, by joining in texts that define our common strivings. Which brings us to the 2010 Nuclear Posture Review Report (NPR).

This is a remarkable document. Within its subject, ‘nuclear policy’, it defines what matters most. It identifies global aims with domestic interest. It calls for programs which address the present but build for the future. The aim of ‘elimination of nuclear weapons’ is repeatedly invoked, but characterized as an aim remote and difficult to achieve. In one sense the NPR assumes a world of contest, threat, and dangers akin to that today, but it also argues for actions to ‘reduce dangers’ and create conditions in which

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eliminating nuclear weapons would not carry with it ‘the risk of instability and insecurity’.

In much of what follows I raise questions, probe the meaning of some sections of the NPR, and judge it with the goal of ‘zero nuclear weapons’ much in mind. But I wish to be counted among its champions. I make no secret of approving, in large measure, Barack Obama’s initiatives in nuclear policy. The NPR shows the effects of reasoned judgment and sound political sense. There are views reflected in the NPR with which I disagree, but that does not diminish, in my eyes, the White House or the process.

What is the NPR About?

The usual approach to a document like the NPR is to quote, and underscore, its departures from past policy. The 2010 NPR recasts US ‘negative security assurances’, redefining those against whom the United States promises not to use nuclear weapons. The US declares it “will not develop new nuclear warheads” and “will not support new military missions or provide for new military capabilities.” These are significant departures, so much so that the qualifications associated with them must be carefully examined.

But the stunning importance of the 2010 NPR lies elsewhere, not in narrow specifics but in its declaration of “an effective strategy [that must] be sustained over time, with support from a succession of U.S. Administrations and Congresses,” a strategy addressing both immediate threats from the existence of nuclear weapons and nuclear materials—threats of proliferation and ‘terrorism’—and steps toward elimination of nuclear weapons. This is more than a strategy. It is a long-term plan, a project, a commitment, an elaboration and coordination of policies requiring broad political support.

As put by Secretary of Defense Robert M. Gates

This Nuclear Posture Review provides a roadmap for implementing President Obama’s agenda for reducing nuclear risks to the United States, our allies and partners, and the international community. As the President said in Prague last
year, a world without nuclear weapons will not be achieved quickly, but we must begin to take concrete steps today.

This NPR places the prevention of nuclear terrorism and proliferation at the top of the U.S. policy agenda, and describes how the United States will reduce the role and numbers of nuclear weapons.²

Exegeses

Audiences & Coordinations

The NPR speaks to multiple audiences,³ which form dialectical pairs. Domestic and foreign, Democratic and Republican, domestic nuclearists and ‘arms controllers’, ‘allies and partners’ (distinguished from, by implication, ‘others’), nuclear weapon states and NPT-compliant non-nuclear-weapon states, NPT compliant and NPT non-compliant states, or the ‘community’ and ‘outliers’.

This is a “roadmap”, as Secretary Gates has written. It sets out norms and tasks that all of these distinct constituencies could embrace. It embodies guidelines for the United States Government and the Congress—in effect, “this is what President Obama expects you to do”—but also calls on both Obama’s domestic opposition and all foreign governments to contribute to the common effort. The NPR is explicit in seeking commitment from the broadest constituencies:

The elements of such a strategy must be integrated, both nationally—across federal agencies and between the executive and legislative branches—and internationally among a wide range of partner governments. And an effective strategy must be sustained over time, with support from a long succession of U.S. Administrations and Congresses. A balanced, integrated, and sustained strategy will require a strong bipartisan

³ including the US Congress, the Republican Party opposition, US nuclear laboratories, foreign governments as ‘allies and partners’, uncooperative foreign governments of ‘outlier’ states, nuclear weapon peers (especially Russia and China), states under the umbrella of ‘extended deterrence’, and all states which are or might become committed to the NPT.

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Any initiative carrying the stamp of party-partisanship risks being abandoned at the next rotation of Congressional or White House control. It is a US political art, and one Obama illustrates in the NPR’s framing of the task, to initiate a program which the other major party cannot later undo. Social Security is one example, though its status didn’t stop GW Bush from advocating privatization, unsuccessfully. Hence the NPR’s salute to bipartisanship, and acknowledgment it would need the support of “a long succession of U.S. Administrations … .”

The NPR is a coordination document. A public text declaring how White House policy is to be enacted enables reference by government personnel, regardless of standing or agency, and a yardstick by which citizens can hold government accountable. At the same time, it empowers foreign governments with a catalogue of norms by which the White House has declared it will be bound. If the 2010 NPT Review Conference achieves a substantive communique that too will be a coordination document, as it springs from the NPT Treaty, signed and ratified by adherents, and aspires to a common text by consensus.

“Most Immediate and Extreme Threat”: Is This Premise Wrong?

No doubt the security universe today is radically different from that which prevailed in 1989-1991, as the Cold War came to an end. But does that justify the bugle call with which the 2010 NPR mobilizes attention? It claims that

- “The threat of global nuclear war has become remote …”

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4 NPR, p. 2.
“... but the risk of nuclear attack has increased.”
“The most immediate and extreme threat today is nuclear terrorism.”

In my judgment, a serious case can be made that each of these propositions, most importantly the third, is wrong. Yet I welcome this NPR. It responds to a world I otherwise recognize. It is a well-reasoned advocate for many initiatives that should be undertaken, as well as for others which may simply reflect a troubled internal political complex in the United States. In any case, we can understand better the problem of coordinating nuclear policy across the globe by taking a contrarian view of the NPR’s three claims.

Re Claim 1. The main Cold War scenarios leading to global nuclear war are now widely understood as catastrophic. The likelihood that any of today’s states would launch, or fall into, ‘global nuclear war’ is certainly far smaller than at the height of the Cold War. But the possibility of widespread use of nuclear weapons remains, as long as inventories are in place. In that sense the threat of widespread nuclear war remains real, and the need for action to reduce the threat urgent. We should not make the mistake of thinking that reduced probability frees us from the spectre of unimaginable devastation.

Re Claim 2. Has the risk of nuclear attack increased? There are risks that did not exist before, since three states that in 1991 were not able to launch a nuclear attack—Pakistan, India, and North Korea—have tested devices and seem bent on further development and militarisation. Use of nuclear weapons in regional conflict, by these states or by Israel, is possible. Whether the probability of use is greater today than in 1991 is unclear. Perhaps we should say that there are risks that did not exist during the Cold War, but the probability that these new risks will lead to nuclear attack is indeterminate. Many believe that the likelihood any of the N5 (US, UK, Russia, China and France) would use nuclear weapons has declined since 1991.

Re Claim 3. I find this language—“immediate and extreme threat”—inflammatory and misdirecting, and to that extent not only
a poor choice but wrong. I am especially concerned that it points away from the possibilities of accidental or unauthorized use of the existing nuclear inventories of the N5, Pakistan, Israel, and India, not by ‘terrorists’ but by internal dissidents, or in civil war, or as a consequence of a lapse in state control of weapons, or by sheer accident or misunderstanding. That threat is real, present, immediate, and its consequences, were it to be realized, extreme.

The scenario that has frightened US and other analysts since 9.11 is that a breakdown of nuclear stewardship by one country—Pakistan—could put nuclear weapons and fissile material in the hands of a global terror consortium—Al Qaeda—hostile to the United States. The issue is more disturbing, in US eyes, because US efforts to assist Pakistan in enhancing security of its nuclear assets have been bedeviled by Pakistani fear that Washington would attempt to seize those assets in a crisis. If one of Pakistan’s measures to protect its deterrent from India is to store weapons at several, scattered sites, then the risk that one site could be compromised in a crisis would be to that extent enlarged. Pakistan presents a vivid challenge to indefinite, managed non-use of nuclear weapons on hand. My point: even if Al Qaeda vanished risks would remain, risks inherent in maintaining an inventory of deployed nuclear weapons and fissile material, risks not addressed by a focus on terrorism.

Perhaps my argument concerns the use of the term ‘threat’. The ‘threat’ to which the 2010 NPR refers is the possibility that a usable nuclear weapon or fissile material from which a weapon could be made could leak from a known State program into the hands of private parties bent on committing an act of terror. Barack Obama’s language, in remarks to reporters prior to the 12-13 April 2010 Nuclear Security Summit in Washington, is even more fulsome: that the possibility of a terrorist organization obtaining a nuclear weapon was “the single biggest threat to U.S. security, both short-term, medium-term and long-term.”

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made to prevent any such diversion. But ‘terrorists’ pose no nuclear threat as long as they are denied nuclear weapons and a large enough quantity of highly enriched uranium or plutonium from which a weapon could be made. This double quality of the problem—that even one nuclear weapon detonated in a city would have horrendous effects, but that even that one weapon is unattainable without uranium or plutonium, both pointedly subject to control—is at the root of the NPR’s emphasis on this issue. Two facts should be kept in mind in judging whether this threat is “immediate” and “extreme”: first, there is nothing in the public record to show that even a single nuclear weapon or sufficient fissile material to make one has entered the international black market; and, second, at the first hint that a weapon or its components were in play there would be a race between national intelligence agencies and the intending terrorists to stop their plan before they could solve the significant technical barriers to converting their prize into a usable terrorist device.

US officials are well aware, however, that they might not succeed in stopping a plot, once the horse had bolted from the barn. The NPT states that there are “improving but currently insufficient capabilities to detect, interdict, and defeat efforts to covertly deliver nuclear materials or weapons.” My guess is that this will remain so. We value the capacity to interdict, but cannot rely on it. The site for control is the point at which weapons are deployed, or weapons or fissile material stored and produced. The number of such choke-points is finite; each one can be listed; contents can be counted or measured; and physical security can be practiced and enforced. That something akin to this is the object of Barack Obama’s Nuclear Security Summit, and his corresponding call in Prague on 5 April 2009 to secure all vulnerable nuclear materials within four years, is a strength of White House policy. The stated premises may be wrong, the greater danger may lie in surprises other than ‘terrorism’, but the steps to be taken are nonetheless sound.

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6 NPR, p. 3.
Declared “Five Key Objectives”

These five “key objectives” organize the Review:

1. Preventing nuclear proliferation and nuclear terrorism;
2. Reducing the role of U.S. nuclear weapons in U.S. national security strategy;
3. Maintaining strategic deterrence and stability at lower nuclear force levels;
4. Strengthening regional deterrence and reassuring U.S. allies and partners and
5. Sustaining a safe, secure, and effective nuclear arsenal.

Aims 1 through 4 can contribute to global zero. Aim 5 respects the faux de mieux commitment to deterrence as long as others have nuclear weapons, a condition to rendering the process of nuclear abolition politically possible. Aims 2 and 3 specifically support Aim 1, to the extent their implementation results is observable force reductions and a lesser military role for nuclear weapons.

At the same time, all except Aim 2 echo themes insisted upon by nuclearists and the Republican Opposition, anticipating critiques of White House objectives in now managing and ‘ultimately’ eliminating nuclear weapons. Similarly, Aim 3 implies that strategic deterrence and stability are compatible with cuts in numbers.

Discussion of the longer term is offloaded to a final chapter, titled “Looking Ahead: Toward a World Without Nuclear Weapons.”

NPT Article VI ‘Progress’

The NPT’s drafters cited NPT Article VI three times, but did not confront what this Treaty commitment actually mandates. It’s useful to remind ourselves of the text:

Artcle VI

Each of the Parties to the Treaty undertakes 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.

Now let’s look at the NPR references:

By reducing the role and numbers of U.S. nuclear weapons—meeting our NPT Article VI obligation to make progress toward nuclear disarmament—...” [p. 4. See also p. 7 “thereby demonstrating that we are meeting our NPT Article VI obligation...”]

... the NPT ... fundamental bargain is still sound: ... those with nuclear weapons work towards disarmament. [p. 4]

But that is not what Article VI requires. Article VI says nothing about ‘progress’ or ‘working toward’. It calls for negotiation to three objectives: ending the nuclear arms race, nuclear disarmament, and general and complete disarmament. It is a big plus that the United States now places nuclear disarmament—elimination and prohibition—once again on the global agenda, but that is not yet undertaking negotiation to that end.

My purpose in calling the NPR’s claim into question is neither to diminish the Obama initiatives nor to quibble about language. My point is simply that the NPT requires more. The United States should not claim it is meeting its Article VI obligations until it has fully invested itself in an actual, ongoing negotiation, or negotiations, to which it committed itself in signing and ratifying the NPT.

There are those who insist that negotiations today would be ‘premature’. Of what are they afraid? Cannot rational men and women discuss, without endangering their national interests, what governments must do to safely, securely, and effectively eliminate nuclear weapons?
Missile Defense

The NPR mentions missile defence so often that it is startling. Some twenty-two times. Many references are in the context of regional assurances.

The problem is that BM defense contributes nothing helpful to solving the problems posed by existing strategic inventories, nuclear proliferation, or the prospect of ‘nuclear terrorism’. Far from promising stability, BMD cannot be tested against an adversary, may not work, and assumes the collusive enemy who will employ its nuclear weapons in just the way that the defense is designed to block. Missile defense complicates the quest for stable transition to zero. But in the United States ongoing missile defense programs have become an unassailable cash-hungry sacred cow. And in turn the authors of the NPR have knelt and prostrated themselves before the priests of missile defense.

Why have otherwise reasonable, rational drafters bought into missile defense? We can only speculate, but there appear to be three reasons. First, not doing so would provide the Republican Opposition with an exploitable attack against the White House. Second, it responds to belief among right-wing elements in a handful of foreign countries that regional missile defense would serve their security needs. Third, ABM research and development also serves agendas of anti-satellite weapons and ‘space control’, expressed in the NPR as the United States “protect[ing] its assets in cyberspace and outer space.” To see how regional and space threads are drawn together, consult page 33:

[US land, air, and naval] forces are enabled by U.S. capabilities to protect its assets in cyberspace and outer space

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7 ‘Some’ because it depends how you count. This count includes the Executive Summary but excludes some references to the 2010 Ballistic Missile Defense Review and two pretty pictures of launched ABM interceptors.

8 There are arguments on behalf of systems to counter or dilute missile attack against forward military positions and naval ships, but these uses are at most thinly relevant to nuclear policy.
and enhanced by U.S. capabilities to deny adversaries’ objectives through resilient infrastructure (including command and control systems), global basing and posture, and ballistic missile defense and counter-WMD capabilities.

Effective missile defenses are an essential element of the U.S. commitment to strengthen regional deterrence against states of concern. Thus, while the United States will maintain a nuclear deterrent to cope with such states, we are also bolstering the other critical elements of U.S. deterrence, including conventional and ballistic missile defense capabilities.

That is, part of the price of having far-flung bases and the capabilities they make possible is to offer host countries both the substance and the appearance of protection.

**Ballistic Missile Submarines**

If one thought that classic nuclear deterrence could not be sustained, then the urgency of a political solution to the nuclear problem would be greater. But why should we imagine that the assumptions underlying deterrence could prove uncertain or unsound?

Of course deterrence assumes that delivery systems will remain viable, in sufficient numbers, regardless of any steps the adversary might take. Are the NPR’s drafters concerned about this? There are two obscure references in the NPR that deserve notice.

Several times, in some cases arguing that steps it proposes would permit the United States to reduce its stock of non-deployed warheads, the NPR refers to retained non-deployed warheads as a “hedge against technical or geopolitical surprise.” And so it calls for retaining “Some ability to ‘upload’ non-deployed nuclear weapons on existing delivery vehicles.” What might ‘technical surprises’ be? Logic seems to require that only two kinds of technical surprises are possible: that some unexpected failure of a significant number of warheads or delivery vehicles develops spontaneously, or that the adversary achieves some hitherto unexpected capacity to prevent warheads being delivered to target. This may be nothing but formal caution. After all, ‘surprises’ aren’t known beforehand. But those who insist on retaining nuclear weapons for the indefinite future...
might reflect on the drafters’ insistence that the possibility of surprise be kept in mind.

The second reference is to survivability of ballistic missile submarines:

Today, there appears [sic] to be no credible near or midterm threats to the survivability of U.S. SSBNs. However, given the stakes involved, the Department of Defense will continue a robust SSBN Security Program that aims to anticipate potential threats and develop appropriate countermeasures to protect current and future SSBNs.⁹

Notice how hedged that language is. There appear to be. They must believe ‘potential threats’ are possible, to which they observe there is a program to ‘develop appropriate countermeasures’.

This is a reminder that the status quo is not without uncertainty and risk.

When Would the US Use Nuclear Weapons?

Many analyses of the NPR focus on what the Obama Administration means by reducing the role of nuclear weapons.

... the United States is now prepared to strengthen its longstanding “negative security assurance” by declaring that the United States 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. ...

... the United States affirms that any state eligible for the assurance that uses chemical or biological weapons against the United States or its allies and partners would face the prospect of a devastating conventional military response—and that any individuals responsible for the attack, whether national leaders or military commanders, would be held fully accountable. Given the catastrophic potential of biological weapons and the rapid pace of bio-technology development, the United States reserves the right to make any adjustment in the assurance that may be warranted by the evolution and proliferation of the biological weapons threat and U.S. capacities to counter that threat.

⁹ NPR, p. 23.
In the case of countries not covered by this assurance—states that possess nuclear weapons and states not in compliance with their nuclear non-proliferation obligations—there remains a narrow range of contingencies in which U.S. nuclear weapons may still play a role in deterring a conventional or CBW attack against the United States or its allies and partners. The United States is therefore 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.10

This extends, the NPR states explicitly, a “revised” assurance. It replaces earlier assurances. New categories are introduced.

The starting-point of nuclear policy remains deterrence of nuclear attack:

The fundamental role of U.S. nuclear weapons, which will continue as long as nuclear weapons exist, is to deter nuclear attack on the United States, our allies, and partners.11

Despite calls to do so, the drafters chose not to confine nuclear weapons to the sole role of nuclear deterrence. With respect to non-nuclear attack, two categories of states are defined as salient: those “not in compliance with their nuclear non-proliferation obligations” and those that have nuclear weapons (which the NPR does not enumerate, but which we can take to be Britain, Russia, China, France, Israel, Pakistan, India, and North Korea). The United States may practice deterrence—nuclear deterrence—toward such states to deter a non-nuclear attack, a “conventional or CBW attack,” against “the United States or its allies and partners.” What this means is that someone will determine that a state is “not in compliance” and then upon learning of an alleged “attack” may determine that deterrence of a “conventional or CBW attack” has failed … whereupon the United States “may” bring nuclear weapons into play to threaten or actually strike the offending state.

10  NPR, p. viii.
11  NPR, p. vii.
And that is the weakness of the text. The United States appears to reserve to itself the judgments whether a state is ‘non-compliant’ and whether a state has committed an ‘attack’. Again, I’m not dealing in quibbles, as the unilateral US decision to launch war on Iraq on 19 March 2003 illustrates, for the crux of the US rationalization on launching that war was that Iraqi nuclear efforts violated its NPT obligations and that its efforts to make BW and CW further justified war. But there were no such programs. Decision for war by one state alone, or a few, has a bad odour, and is in disfavor. The same could be said of claims that an uncooperative state is ‘non-compliant’.

Does a state that has not signed or ratified the NPT (Israel) have ‘nuclear non-proliferation obligations’ with which it can be judged to be ‘non-compliant’? Or is that question moot, because Israel is a ‘possessor’ of nuclear weapons despite its not admitting that it is? Or is it impractical because Israel would not attack a US ally or ‘partner’? Irrelevant, because the United States would not interpret any Israeli action as one to be subject to nuclear threats?

Does a state which asserts it has withdrawn from the NPT (North Korea) have ‘nuclear non-proliferation obligations’?

Is the argument that every state has ‘nuclear non-proliferation obligations’, by virtue of the near-universality of the NPT and a reading of germane UN Security Council resolutions?

What is the point of threatening “states that possess nuclear weapons” that you may escalate a “conventional or CBW attack” by introducing nuclear weapons into the conflict? For example, would Russia’s having nuclear weapons mean that the United States would strike Russia with nuclear weapons because Georgia said Russia had attacked Georgia with ordinary non-nuclear forces? If the Chinese or Russian government believed that an adjoining state had made armed inroads into its territory, and responded with a conventional push-back, would the United States then seriously consider reaching for nuclear weapons? How will the militaries of China and Russia read these sections of the NPR?

Conditions
In the section with the subhead “Toward a World Free of Nuclear Weapons” the NPR lays down “demanding” conditions:

The conditions that would ultimately permit the United States and others to give up their nuclear weapons without risking greater international instability and insecurity are very demanding. Among those are the resolution of regional disputes that can motivate rival states to acquire and maintain nuclear weapons, success in halting the proliferation of nuclear weapons, much greater transparency into the programs and capabilities of key countries of concern, verification methods and technologies capable of detecting violations of disarmament obligations, and enforcement measures strong and credible enough to deter such violations. Clearly, such conditions do not exist today. But we can—and must—work actively to create those conditions.12

Although the list of conditions are not quite the same, this emphasis on conditions echoes positions advanced by British officials earlier in 2010.13 What are described as conditions are instead desiderata, access to which can only be known in retrospect. They concern the outcomes of episodes, not initial facts. Calling these ‘conditions’ poses a serious logical problem.

Of course we may, and regularly do make a reasoned guess that, given a challenge to the abolition regime, the circumstances in place at the outset of the episode will include capabilities required to achieve an adequately preferred outcome. But we don’t know. Instead, until we declare the episode at an end we must accept some risk, some uncertainty, that it will end badly, or not as well as we wish. An apparent end to proliferation may be upset by a hitherto unexpected program, seeming solution of a regional dispute may

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12 NPR, pp. 48-49. Equivalent language is in the Executive Summary, p. xv.

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again flare, and the enforcement measures institutionalized and made real with weapons and troops may fail when put to the test. In short, there is inescapable risk, as we cannot know the future. But this is how all issues in security present themselves. We rely on informed and reasoned judgment. Elsewhere I have said that the judgment at issue in denuclearization is that the risks and uncertainties under denuclearization are significantly less, and more tractable, than the risks and uncertainties inherent in nuclearism, and that the risks inherent in nuclearism are not tolerable.\footnote{Bruce D. Larkin, \textit{Designing Denuclearization: An Interpretive Encyclopedia} (New Brunswick, New Jersey: Transaction Publishers, 2008), p. x.}

The desiderata matter. Demonstrable achievements would weigh in the balance, as each government judged whether taking the step to nuclear zero was now sound. My quarrel with the ‘conditions’ language of the NPR, then, is that it sets requirements that are logically inachievable. And in doing so it gives nuclearists a cudgel and pike with which to fend off realistic, practical programs for zero. Instead, while ‘conditions’ remain imperfect, or incomplete, the means to contain risk and respond to the unexpected must be the ongoing, continuous concern of governments as sites of political initiative and political imagination. The exception to my indictment is the NPR’s call for “greater transparency,” which accepts, as it must, that even with the greatest attainable transparency there will be facts that are not known.

\textit{New Warhead Designs?}

‘Nuclearists’ and their critics, whom I term ‘prudent abolitionists’, have been at odds about new nuclear warhead designs for at least the last fifteen years. Briefly, nuclearists seek and anticipate indefinite retention of nuclear weapons and their place in US security policy into the indefinite future. To that end they promote novel nuclear missions and warn that the existing stockpile is subject to deterioration, requiring new designs and new production.
Abolitionists are not swayed by these arguments: they seek a future without nuclear weapons.

The directors of the three US nuclear weapon labs (Livermore, Los Alamos, and Sandia) have declared their support for the NPR.\footnote{“Tri-Lab Directors’ Statement on the Nuclear Posture Review,” 9 April 2010. http://www.sandia.gov/news/resources/news_releases/tri-lab-directors%E2%80%99-statement-on-the-nuclear-posture-review/} In doing so, however, they call attention to the section of the NPR which seems to offer the labs some room to bring forth weapons which are unlike those now deployed. The salient NPR language:

\begin{quote}
The United States will not develop new nuclear warheads. Life Extension Programs will use only nuclear components based on previously tested designs, and will not support new military missions or provide for new military capabilities.

The United States will study options for ensuring the safety, security, and reliability of nuclear warheads on a case-by-case basis, consistent with the congressionally mandated Stockpile Management Program. The full range of LEP approaches will be considered: refurbishment of existing warheads, reuse of nuclear components from different warheads, and replacement of nuclear components.

In any decision to proceed to engineering development for warhead LEPs, the United States will give strong preference to options for refurbishment or reuse. Replacement of nuclear components would be undertaken only if critical Stockpile Management Program goals could not otherwise be met, and if specifically authorized by the President and approved by Congress.\footnote{NPR, p. 39.}
\end{quote}

‘Engineering development’ implies doing something not done before. We could understand that easily if the project were to bring forward a warhead described as ‘new’, such as the once-proposed ‘reliable replacement warhead’ (RRW). It is less clear what sorts of changes in existing warheads would require ‘engineering development’ but not result in a warhead of a new design.

To parse this issue, as the quoted text shows, the drafters distinguished three options: refurbishment, reuse, and replacement

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by nuclear components “based on previously tested designs.” If we are using ordinary English, we would understand ‘refurbishment’ to mean operations on existing parts of a warhead,17 ‘reuse’ to mean shifting components from other warheads, and ‘replacement’ to mean something distinct from refurbishment and reuse.

The third category is full of possibility. Most simply, and most innocently, (i) it could mean nothing more than remanufacture, creating new nuclear components that are, as far as possible, indistinguishable from the original component of the now-deployed weapon when it was new. Or (ii) it could mean introducing ‘nuclear components’ not identical to any in the deployed warhead, but which had been elements of a warhead design previously ‘tested’. Or (iii) it could mean more than that, since the phrase “based on” opens the door to a newly-designed version of a component “previously tested.”18

For completeness, note the consistent use of the phrase ‘nuclear components’. What of the non-nuclear components of a warhead?

There may be a hint in the commitment to the “safety and security of warheads over time.”19 Given the labs’ previous focus on winning approval of the RRW, it seems unlikely that there would be no minds bent on achieving some of the RRW’s ascribed purposes within the ‘no new warhead’ constraint.

However fruitful or fraught these technical distinctions might prove to be, the most significant part of this text is a direct statement of Congressional and White House authority over how elastic this language can prove to be. “Replacement of nuclear components would be undertaken only if … specifically authorized by the President and approved by Congress.”20 The message is clear: we will entertain replacement if it can be shown to be necessary, but we will not give you a blank check.

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17 Perhaps fresh tritium insertion is included in ‘refurbishment’.
18 Quoted language from NPR, p. 39.
19 NPR, p. 38.
20 NPR, p. 39.
The plain words of the NPR are that “The approach described here ... will not develop new nuclear warheads, and it will be structured so as not to require nuclear testing.”

**Accounting and Verification**

Any nuclear policy that calls for growing restraint and collaboration among states must address two questions: (1) if we do not know what holdings of nuclear weapons and fissile material there are, how can these facts be gathered and pooled? and (2) can we verify inventory, facilities, and production claims?

This NPR collects and reenforces previous evidence that the Obama Administration is bent on enhancing control of nuclear weapons and fissile material. This is among its strongest features. It proposes “to secure all vulnerable nuclear materials worldwide” and notes the April 2010 Nuclear Security Summit, Global Threat Reduction Initiative, International Nuclear Material Protection and Cooperation Program, and cooperative threat reduction programs.

And while the details are not yet known, the NPR anticipates the United States will initiate a comprehensive national research and development program to support continued progress toward a world free of nuclear weapons, including expanded work on verification technologies.

**Unresolved Questions**

Irreversibility. Bringing 193 governments to sufficient agreement that elimination is possible will be more within reach if the principle of irreversibility is a binding and enforceable norm.

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21 NPR, p. 40.
22 NPR, p. 11.
23 NPR, p. 47.
Reconstitution. There is casual reference to the possibility of reconstitution of US nuclear capabilities in case of “breakout by an aggressor,” if deterrence failed after abolition.\(^2\) While this might be reassuring to domestic skeptics, it is sure to invite questions by other governments whether the United States would insist on retaining capabilities for reconstitution, or do so clandestinely, as part of an agreement to zero.

Classified Portions. Previous NPRs have been plagued by leakage of embarrassing classified draft and provisions. The 2010 NPR, by contrast, is completely public. With one qualification. In the context of discussing the Stockpile Management Program, the NPR states that

> While the general parameters of this plan are discussed here, some key information about the specific numbers and types of warheads in different elements of the stockpile are classified, as are specific plans for their future disposition, and will be briefed separately to Congress.\(^3\)

We leave it to the wonk community to reason on what this classified information might be. Is it incidental, of little salience for reciprocal commitments to “secure all vulnerable nuclear materials worldwide”? Or is it that embarrassment would follow public disclosure?

And finally, does ‘briefing’ Congress mean that just a handful of Members—say, eight—will be told … and will they be in a position to judge whether nondisclosure is appropriate?

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\(^2\) NPR, pp. 42 and 48.

\(^3\) NPR, p. 38.
Abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CBW</td>
<td>Chemical and Biological Warfare</td>
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<tr>
<td>FMCT</td>
<td>Fissile Material Control Treaty or Fissile Material Cutoff Treaty</td>
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<td>IAEA</td>
<td>International Atomic Energy Agency</td>
</tr>
<tr>
<td>NPR</td>
<td>Nuclear Posture Review</td>
</tr>
<tr>
<td>NPT</td>
<td>Non-Proliferation Treaty [Treaty on the Non-Proliferation of Nuclear Weapons]</td>
</tr>
<tr>
<td>RRW</td>
<td>Reliable Replacement Warhead</td>
</tr>
<tr>
<td>WMD</td>
<td>Weapons of Mass Destruction</td>
</tr>
</tbody>
</table>

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