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AIIA Policy Commentary

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**Speech by Prime Minister Rudd: “Building on ASEAN’s
Success – Towards an Asia Pacific Century”
Singapore, 12 August 2008***

[...] There is the continuing challenge of non-proliferation for which the next global challenge looms at the point of the Nuclear Non-Proliferation Treaty (NPT) Review Conference in 2010.

The Australian Government has established an International Commission on Nuclear Non-proliferation and Disarmament. It will be co-chaired by former Australian Foreign Minister Gareth Evans and former Japanese Foreign Minister Yoriko Kawaguchi. The Commission has a big task in front of it.

The Nuclear Non-Proliferation Treaty has done a good job over the past 40 years in limiting the spread of nuclear weapons. But some states have sought to challenge the NPT. North Korea has developed a nuclear program – although we welcome the recent progress towards solving the question of this program. Other states, such as Iran, have defied the International Atomic Energy Agency and, in doing so, have undermined the Treaty.

With the next five-yearly review of the Treaty due in 2010, we need to look at how we can strengthen support for the Treaty. We need to strengthen support for safeguards so that nuclear material is strictly controlled. And we need to develop new thinking about how we work towards the goal of the eventual elimination of nuclear weapons. It is crucial that we build widespread support for the Treaty, across regions and between those states with nuclear weapons and those without. The Commission’s task is to help build that support.

* <http://www.pm.gov.au/node/5643>

**Address by Prime Minister Rudd to the
64th Session of the United Nations General Assembly
New York, 23 September 2009***

[...] This organisation was born in the shadow of nuclear weapons and that shadow remains today. One truth remains absolutely clear: the proliferation of nuclear weapons can never make any country more secure. The nuclear test by North Korea this year was rightly condemned across the international community. It reiterates that the only path to safety is through the eventual elimination of nuclear weapons.

Australia is encouraged by the commitment of the US and Russia to further reduce their nuclear arsenals. But the international community must also progress the broader disarmament and non-proliferation agenda.

The Nuclear Non-Proliferation Treaty has played a crucial role in limiting the spread of nuclear weapons - but the Treaty today is under challenge. We must work to ensure the Treaty's global security benefits are reinforced by a successful Review Conference in 2010. To reinvigorate global consensus and activism ahead of that Conference and beyond, Australia and Japan last year established the International Commission on Nuclear Non-Proliferation and Disarmament. In the next few months, the Commission will produce its final report. Its aim is to chart a practical and realistic course to achieve a strengthened non-proliferation and disarmament regime, leading to the ultimate elimination of nuclear arsenals.

Tomorrow's Security Council summit on non-proliferation and disarmament is important for us all. We must not lose the opportunity it offers to summon the political resolve to move towards a nuclear weapons-free world.

* <http://www.pm.gov.au/node/6226>

**Press Release, International Commission on Nuclear Non-Proliferation and Disarmament:
“Commission Report Launched in Tokyo: Towards a Nuclear Weapon Free World”^{*}
Tokyo, 15 December 2009**

The Report of the International Commission on Nuclear Non-proliferation and Disarmament, “Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers”, was presented today in Tokyo to the Prime Ministers of Australia and Japan, their excellencies Kevin Rudd and Yukio Hatoyama, by the Commission Co-Chairs, former foreign ministers Gareth Evans and Yoriko Kawaguchi, at a ceremony at the Japanese Prime Minister’s residence.

The full text of the report is available online at www.icnnd.org.

The 230-page report, the most comprehensive of its kind yet produced, is the unanimous product of an independent global panel of fifteen commissioners, supported by a high-level international advisory board and worldwide network of research centres, who together brought an unprecedented level of technical and policy expertise, and strategic and political experience, to their year-long deliberations and consultations.

Its detailed analysis, sharply focused policy recommendations, and short, medium and long term practical agendas, address the whole range of issues relating to nuclear non-proliferation, disarmament and the peaceful uses of nuclear energy with which policymakers are presently wrestling in the context of the 2010 Nuclear Non-Proliferation Review Conference and beyond.

With new U.S. and Russian leadership seriously committed to nuclear disarmament action, there is a new opportunity - the first since the immediate post-World War II and post-Cold War years - to halt, and

^{*} http://www.icnnd.org/releases/091215_report.html

reverse, the problem of nuclear weapons once and for all. The report describes, not just rhetorically but in the detail that policymakers need, how that opportunity can and should be seized.

The starting point of the report is that the nuclear status quo is not an option. Nuclear weapons are [the] only ones ever invented that have the capacity to wholly destroy life on this planet, and present arsenals could do so many times over. It defies credibility that, so long as any such weapons exist, they will not one day be used, by accident, miscalculation or design. The problem of nuclear weapons is at least equal to climate change in terms of gravity - and much more immediate in its potential impact.

The report evaluates in detail, making it clear that they defy complacency, the threats and risks associated with the failure to persuade existing nuclear-armed states to relinquish their weapons, to prevent new states acquiring them, to stop terrorist actors gaining access to them, and to properly manage a rapid expansion in civil nuclear energy.

Among the more significant of the report's 76 recommendations are:

- The setting of a medium term 'minimization point' target - to be reached by 2025 - of a world with less than 2,000 nuclear warheads - a more than 90 per cent reduction of present nuclear arsenals.
- A full package of recommended outcomes for the 2010 NPT Review Conference, including a proposed new 20-point statement on disarmament, tough new measures against proliferation, and a suggested approach to moving forward the issue of a weapons of mass destruction free zone in the Middle East.
- A plea for early movement by the nuclear-armed states on refining their nuclear doctrine to limit the role of nuclear weapons and give unequivocal assurances that they will not be

used against non-nuclear weapons states, and for a rethinking of existing approaches to 'extended deterrence' .

- Support for the further development of civil nuclear energy, subject to effective security, safeguards and safety measures, and with much more attention being paid to proliferation resistant technologies and to creating disincentives to states building their own enrichment and reprocessing facilities.
- Strong support for the continued delegitimation of nuclear weapons, and the ultimate achievement of a completely nuclear weapon free world, while recognizing the many difficult conditions that will have to be satisfied before the movement from minimum levels to zero is achievable.

Remarks by President Barack Obama Prague, 5 April 2009*

[...] Now, one of those issues that I'll focus on today is fundamental to the security of our nations and to the peace of the world -- that's the future of nuclear weapons in the 21st century.

The existence of thousands of nuclear weapons is the most dangerous legacy of the Cold War. No nuclear war was fought between the United States and the Soviet Union, but generations lived with the knowledge that their world could be erased in a single flash of light. Cities like Prague that existed for centuries, that embodied the beauty and the talent of so much of humanity, would have ceased to exist.

Today, the Cold War has disappeared but thousands of those weapons have not. In a strange turn of history, the threat of global nuclear war has gone down, but the risk of a nuclear attack has gone up. More nations have acquired these weapons. Testing has continued. Black market trade in nuclear secrets and nuclear materials abound. The technology to build a bomb has spread. Terrorists are determined to buy, build or steal one. Our efforts to contain these dangers are centered on a global non-proliferation regime, but as more people and nations break the rules, we could reach the point where the center cannot hold.

Now, understand, this matters to people everywhere. One nuclear weapon exploded in one city -- be it New York or Moscow, Islamabad or Mumbai, Tokyo or Tel Aviv, Paris or Prague -- could kill hundreds of thousands of people. And no matter where it happens, there is no end to what the consequences might be -- for our global safety, our security, our society, our economy, to our ultimate survival.

* http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered/

Some argue that the spread of these weapons cannot be stopped, cannot be checked -- that we are destined to live in a world where more nations and more people possess the ultimate tools of destruction. Such fatalism is a deadly adversary, for if we believe that the spread of nuclear weapons is inevitable, then in some way we are admitting to ourselves that the use of nuclear weapons is inevitable.

Just as we stood for freedom in the 20th century, we must stand together for the right of people everywhere to live free from fear in the 21st century. And as nuclear power -- as a nuclear power, as the only nuclear power to have used a nuclear weapon, the United States has a moral responsibility to act. We cannot succeed in this endeavor alone, but we can lead it, we can start it.

So today, I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons. I'm not naive. This goal will not be reached quickly -- perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, "Yes, we can."

Now, let me describe to you the trajectory we need to be on. First, the United States will take concrete steps towards a world without nuclear weapons. To put an end to Cold War thinking, we will reduce the role of nuclear weapons in our national security strategy, and urge others to do the same. Make no mistake: As long as these weapons exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that defense to our allies -- including the Czech Republic. But we will begin the work of reducing our arsenal.

To reduce our warheads and stockpiles, we will negotiate a new Strategic Arms Reduction Treaty with the Russians this year. President Medvedev and I began this process in London, and will seek a new agreement by the end of this year that is legally binding and sufficiently bold. And this will set the stage for further cuts, and we will seek to include all nuclear weapons states in this endeavor.

To achieve a global ban on nuclear testing, my administration will immediately and aggressively pursue U.S. ratification of the Comprehensive Test Ban Treaty. After more than five decades of talks, it is time for the testing of nuclear weapons to finally be banned.

And to cut off the building blocks needed for a bomb, the United States will seek a new treaty that verifiably ends the production of fissile materials intended for use in state nuclear weapons. If we are serious about stopping the spread of these weapons, then we should put an end to the dedicated production of weapons-grade materials that create them. That's the first step.

Second, together we will strengthen the Nuclear Non-Proliferation Treaty as a basis for cooperation.

The basic bargain is sound: Countries with nuclear weapons will move towards disarmament, countries without nuclear weapons will not acquire them, and all countries can access peaceful nuclear energy. To strengthen the treaty, we should embrace several principles. We need more resources and authority to strengthen international inspections. We need real and immediate consequences for countries caught breaking the rules or trying to leave the treaty without cause.

And we should build a new framework for civil nuclear cooperation, including an international fuel bank, so that countries can access peaceful power without increasing the risks of proliferation. That must be the right of every nation that renounces nuclear weapons, especially developing countries embarking on peaceful programs. And no approach will succeed if it's based on the denial of rights to nations that play by the rules. We must harness the power of nuclear energy on behalf of our efforts to combat climate change, and to advance peace opportunity for all people.

But we go forward with no illusions. Some countries will break the rules. That's why we need a structure in place that ensures when any nation does, they will face consequences.

Just this morning, we were reminded again of why we need a new and more rigorous approach to address this threat. North Korea broke the rules once again by testing a rocket that could be used for long range missiles. This provocation underscores the need for action -- not just this afternoon at the U.N. Security Council, but in our determination to prevent the spread of these weapons.

Rules must be binding. Violations must be punished. Words must mean something. The world must stand together to prevent the spread of these weapons. Now is the time for a strong international response, and North Korea must know that the path to security and respect will never come through threats and illegal weapons. All nations must come together to build a stronger, global regime. And that's why we must stand shoulder to shoulder to pressure the North Koreans to change course.

Iran has yet to build a nuclear weapon. My administration will seek engagement with Iran based on mutual interests and mutual respect. We believe in dialogue. But in that dialogue we will present a clear choice. We want Iran to take its rightful place in the community of nations, politically and economically. We will support Iran's right to peaceful nuclear energy with rigorous inspections. That's a path that the Islamic Republic can take. Or the government can choose increased isolation, international pressure, and a potential nuclear arms race in the region that will increase insecurity for all.

So let me be clear: Iran's nuclear and ballistic missile activity poses a real threat, not just to the United States, but to Iran's neighbors and our allies. The Czech Republic and Poland have been courageous in agreeing to host a defense against these missiles. As long as the threat from Iran persists, we will go forward with a missile defense system that is cost-effective and proven. If the Iranian threat is eliminated, we will have a stronger basis for security, and the driving force for missile defense construction in Europe will be removed.

So, finally, we must ensure that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global

security. One terrorist with one nuclear weapon could unleash massive destruction. Al Qaeda has said it seeks a bomb and that it would have no problem with using it. And we know that there is unsecured nuclear material across the globe. To protect our people, we must act with a sense of purpose without delay.

So today I am announcing a new international effort to secure all vulnerable nuclear material around the world within four years. We will set new standards, expand our cooperation with Russia, pursue new partnerships to lock down these sensitive materials.

We must also build on our efforts to break up black markets, detect and intercept materials in transit, and use financial tools to disrupt this dangerous trade. Because this threat will be lasting, we should come together to turn efforts such as the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism into durable international institutions. And we should start by having a Global Summit on Nuclear Security that the United States will host within the next year.

Now, I know that there are some who will question whether we can act on such a broad agenda. There are those who doubt whether true international cooperation is possible, given inevitable differences among nations. And there are those who hear talk of a world without nuclear weapons and doubt whether it's worth setting a goal that seems impossible to achieve.

But make no mistake: We know where that road leads. When nations and peoples allow themselves to be defined by their differences, the gulf between them widens. When we fail to pursue peace, then it stays forever beyond our grasp. We know the path when we choose fear over hope. To denounce or shrug off a call for cooperation is an easy but also a cowardly thing to do. That's how wars begin. That's where human progress ends.

There is violence and injustice in our world that must be confronted. We must confront it not by splitting apart but by standing together as free nations, as free people. I know that a call to arms can stir the souls of men and women more than a call to lay them down. But that is why the voices for peace and progress must be raised together.

Those are the voices that still echo through the streets of Prague. Those are the ghosts of 1968. Those were the joyful sounds of the Velvet Revolution. Those were the Czechs who helped bring down a nuclear-armed empire without firing a shot.

Human destiny will be what we make of it. And here in Prague, let us honor our past by reaching for a better future. Let us bridge our divisions, build upon our hopes, accept our responsibility to leave this world more prosperous and more peaceful than we found it. Together we can do it.

Statement by President Barack Obama on the Release of Nuclear Posture Review*

6 April 2010

One year ago yesterday in Prague, I outlined a comprehensive agenda to prevent the spread of nuclear weapons and to pursue the peace and security of a world without them. I look forward to advancing this agenda in Prague this week when I sign the new START Treaty with President Medvedev, committing the United States and Russia to substantial reductions in our nuclear arsenals.

Today, my Administration is taking a significant step forward by fulfilling another pledge that I made in Prague - to reduce the role of nuclear weapons in our national security strategy and focus on reducing the nuclear dangers of the 21st century, while sustaining a safe, secure and effective nuclear deterrent for the United States and our allies and partners as long as nuclear weapons exist.

The Nuclear Posture Review, led by the Department of Defense, recognizes that the greatest threat to U.S. and global security is no longer a nuclear exchange between nations, but nuclear terrorism by violent extremists and nuclear proliferation to an increasing number of states. Moreover, it recognizes that our national security and that of our allies and partners can be increasingly defended by America's unsurpassed conventional military capabilities and strong missile defenses.

As a result, we are taking specific and concrete steps to reduce the role of nuclear weapons while preserving our military superiority, deterring aggression and safeguarding the security of the American people.

* <http://www.whitehouse.gov/the-press-office/statement-president-barack-obama-release-nuclear-posture-review>

First, and for the first time, preventing nuclear proliferation and nuclear terrorism is now at the top of America's nuclear agenda, which affirms the central importance of the Nuclear Non-Proliferation Treaty. We have aligned our policies and proposed major funding increases for programs to prevent the spread of nuclear weapons around the world. Our nuclear security summit next week will be an opportunity for 47 nations to commit to specific steps to pursue the goal of securing all vulnerable nuclear materials around the world within four years. And next month in New York, we will work with the wider world to strengthen the global non-proliferation regime to ensure that all nations uphold their responsibilities.

Second, we are further emphasizing the importance of nations meeting their NPT and nuclear non-proliferation obligations through our declaratory policy. The United States is declaring that we will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Non-Proliferation Treaty and in compliance with their nuclear non-proliferation obligations. This enables us to sustain our nuclear deterrent for the narrower range of contingencies in which these weapons may still play a role, while providing an additional incentive for nations to meet their NPT obligations. Those nations that fail to meet their obligations will therefore find themselves more isolated, and will recognize that the pursuit of nuclear weapons will not make them more secure.

Finally, we are fulfilling our responsibilities as a nuclear power committed to the NPT. The United States will not conduct nuclear testing and will seek ratification of the Comprehensive Test Ban Treaty. The United States will not develop new nuclear warheads or pursue new military missions or new capabilities for nuclear weapons.

As I stated last year in Prague, so long as nuclear weapons exist, we will maintain a safe, secure and effective arsenal that guarantees the defense of the United States, reassures allies and partners, and deters potential adversaries. To that end, we are seeking substantial investments to improve infrastructure, strengthen science and technology, and retain

the human capital we need to sustain our stockpile, while also strengthening the conventional capabilities that are an important part of our deterrent. The nuclear strategy we're announcing today therefore reaffirms America's unwavering commitment to the security of our allies and partners, and advances American national security.

To stop the spread of nuclear weapons, prevent nuclear terrorism, and pursue the day when these weapons do not exist, we will work aggressively to advance every element of our comprehensive agenda - to reduce arsenals, to secure vulnerable nuclear materials, and to strengthen the NPT. These are the steps toward the more secure future that America seeks, and this is the work that we are advancing today.

**Press Conference by President Obama at the Nuclear
Security Summit
Washington D.C., 13 April 2010***

THE PRESIDENT: Good afternoon, everybody. We have just concluded an enormously productive day.

I said this morning that today would be an opportunity for our nations, both individually and collectively, to make concrete commitments and take tangible steps to secure nuclear materials so they never fall into the hands of terrorists who would surely use them.

This evening, I can report that we have seized this opportunity, and because of the steps we've taken -- as individual nations and as an international community -- the American people will be safer and the world will be more secure. [...]

So today is a testament to what is possible when nations come together in a spirit of partnership to embrace our shared responsibility and confront a shared challenge. This is how we will solve problems and advance the security of our people in the 21st century. And this is reflected in the communiqué that we have unanimously agreed to today.

First, we agreed on the urgency and seriousness of the threat. Coming into this summit, there were a range of views on this danger. But at our dinner last night, and throughout the day, we developed a shared understanding of the risk.

Today, we are declaring that nuclear terrorism is one of the most challenging threats to international security. We also agreed that the most effective way to prevent terrorists and criminals from acquiring

* <http://www.whitehouse.gov/the-press-office/press-conference-president-nuclear-security-summit>

nuclear materials is through strong nuclear security -- protecting nuclear materials and preventing nuclear smuggling.

Second, I am very pleased that all the nations represented here have endorsed the goal that I outlined in Prague one year ago -- to secure all vulnerable nuclear materials around the world in four years' time. This is an ambitious goal, and we are under no illusions that it will be easy. But the urgency of the threat, and the catastrophic consequences of even a single act of nuclear terrorism, demand an effort that is at once bold and pragmatic. And this is a goal that can be achieved.

Third, we reaffirmed that it is the fundamental responsibility of nations, consistent with their international obligations, to maintain effective security of the nuclear materials and facilities under our control. This includes strengthening national laws and policies, and fully implementing the commitments we have agreed to.

And fourth, we recognized that even as we fulfill our national responsibilities, this threat cannot be addressed by countries working in isolation. So we've committed ourselves to a sustained, effective program of international cooperation on national [sic] security, and we call on other nations to join us.

It became clear in our discussions that we do not need lots of new institutions and layers of bureaucracy. We need to strengthen the institutions and partnerships that we already have — and make them even more effective. This includes the United Nations, the International Atomic Energy Agency, the multilateral partnership that strengthens nuclear security, prevent nuclear trafficking and assist nations in building their capacity to secure their nuclear materials.

But as I said, today was about taking tangible steps to protect our people. So we've also agreed to a detailed work plan to guide our efforts going forward -- the specific actions we will take. I want to commend my partners for the very important commitments that they made in conjunction with this summit. Let me give some examples.

Canada agreed to give up a significant quantity of highly enriched uranium. Chile has given up its entire stockpile. Ukraine and Mexico announced that they will do the same. Other nations -- such as Argentina and Pakistan -- announced new steps to strengthen port security and prevent nuclear smuggling.

More nations -- including Argentina, the Philippines, Thailand and Vietnam -- agreed to join, and thus strengthen, the treaties and international partnerships that are at the core of our global efforts. A number of countries -- including Italy, Japan, India and China -- will create new centers to promote nuclear security technologies and training. Nations pledged new resources to help the IAEA meet its responsibilities.

In a major and welcomed development, Russia announced that it will close its last weapons-grade plutonium production reactor. After many years of effort, I'm pleased that the United States and Russia agreed today to eliminate 68 tons of plutonium for our weapons programs -- plutonium that would have been enough for about 17,000 nuclear weapons. Instead, we will use this material to help generate electricity for our people.

These are exactly the kind of commitments called for in the work plan that we adopted today, so we've made real progress in building a safer world.

I would also note that the United States has made its own commitments. We are strengthening security at our own nuclear facilities, and will invite the IAEA to review the security at our neutron research center. This reflects our commitment to sharing the best practices that are needed in our global efforts. We're seeking significant funding increases for programs to prevent nuclear proliferation and trafficking.

And today, the United States is joining with our Canadian partners and calling on nations to commit \$10 billion to extending our highly

successful Global Partnership to strengthen nuclear security around the world.

So this has been a day of great progress. But as I said this morning, this can't be a fleeting moment. Securing nuclear materials must be a serious and sustained global effort. We agreed to have our experts meet on a regular basis — to measure progress, to ensure that we're meeting our commitments and to plan our next steps.

And I again want to thank President Lee and the Republic of Korea for agreeing to host the next Nuclear Security Summit in two years.

Finally, let me say while this summit is focused on securing nuclear materials, this is part of a larger effort — the comprehensive agenda that I outlined in Prague last year to pursue the peace and security of a world without nuclear weapons. Indeed, in recent days we've made progress on every element of this agenda.

To reduce nuclear arsenals, President Medvedev and I signed the historic new START treaty — not only committing our two nations to significant reductions in deployed nuclear weapons, but also setting the stage for further cuts and cooperation between our countries.

To move beyond outdated Cold War thinking and to focus on the nuclear dangers of the 21st century, our new Nuclear Posture Review reduces the role and number of nuclear weapons in our national security strategy. And for the first time, preventing nuclear proliferation and nuclear terrorism is at the top of America's nuclear agenda, which reaffirms the central importance of the Nuclear Non-Proliferation Treaty.

And next month in New York, we will join with nations from around the world to strengthen the NPT as the cornerstone of our global efforts to prevent the spread of nuclear weapons even as we pursue greater civil nuclear cooperation. Because for nations that uphold their

responsibilities, peaceful nuclear energy can unlock new advances in medicine, in agriculture, and economic development.

All of these efforts are connected. Leadership and progress in one area reinforces progress in another. When the United States improves our own nuclear security and transparency, it encourages others to do the same, as we've seen today. When the United States fulfills our responsibilities as a nuclear power committed to the NPT, we strengthen our global efforts to ensure that other nations fulfill their responsibilities.

So again, I want to thank my colleagues for making this unprecedented gathering a day of unprecedented progress in confronting one of the greatest threats to our global security. Our work today not only advances the security of the United States, it advances the security of all mankind, and preventing nuclear proliferation and nuclear terrorism will remain one of my highest priorities as President.

The NPT and Disarmament

Marianne Hanson*

The nuclear Non Proliferation Treaty (NPT), negotiated in 1968 and which entered into force in 1970, was designed chiefly to prevent the proliferation of nuclear weapons, but the Treaty's other important function, enshrined in its Article VI, was to ensure the disarmament of the nuclear arsenals held by the nuclear weapon states. As such, the NPT remains the key institutional and legal mechanism by which the elimination of nuclear weapons can be pursued at a global level, and its five-yearly Review Conference provides the key opportunity for reviewing progress in this area.

At no time in its 40 year history have there been such high expectations that the disarmament conditions of the Treaty can be filled than exist now at the 2010 Review Conference being held in New York. Yet it is not likely that these hopes for accelerated disarmament and substantial change on the rhetoric of nuclear weapons' doctrines will be fulfilled.

This is not to say that the 2010 Review Conference (RevCon) will be unimportant. On the contrary, it will be seen as a fresh opportunity for serious debate, given that the past ten years have witnessed a stalemate in the contentious issue of nuclear weapons elimination. Most importantly, it will provide the venue for the United States to re-commit itself at a very public and high diplomatic level to nuclear disarmament, after almost a decade of resistance to this idea by the Bush Administration. In this alone it will represent a vast improvement over the acrimonious Review Conference held in 2005, which was not able to advance the important steps designed to assist disarmament agreed to five years earlier.

The 2005 RevCon, whose broader context was widespread disenchantment with US policies in the war on terror, was dominated by

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the refusal of US Ambassador John Bolton to discuss US nuclear weapons elimination, by North Korea's withdrawal from the treaty, and by suspicions about Iran's nuclear intentions. And while the US was often singled out as preventing agreement, it was also the sharp views of Iran and Egypt that determined the atmospherics of a largely unproductive meeting.

The end result was no progress on important questions of proliferation, compliance and verification, even though most states wished to take action over North Korea's withdrawal from the regime and to persuade Iran to terminate its nuclear program. Neither was there any progress on disarmament. The 'thirteen steps' plan outlined in 2000 required that the nuclear weapon states would ratify the Comprehensive Test Ban Treaty (CTBT), accomplish substantial reductions in their nuclear arsenals, conduct changes to the operational status of nuclear weapons, conclude a verifiable Fissile Material Cut-off Treaty and move to a diminished role for nuclear weapons in their security policies, all of which were seen as vital stepping stones towards the eventual elimination of nuclear weapons. Not only were none of these steps achieved by 2005; even discussion of the 13 step plan was prevented in the heated and unproductive circumstances of the meeting.¹ In the words of Joseph Cirincione: "the 2005 Review Conference was a disaster."²

This distinct lack of achievement helps explain the many hopes that are pinned on the 2010 meeting. And while it is reasonable to expect that the new government in Washington – more specifically President Obama's very public commitment to nuclear disarmament – presages a more positive outcome for 2010, it is important to understand the limits of even Obama's diplomatic preferences.

Obama, more than any other US president, has shown a willingness to fulfill the NPT's disarmament requirements. The treaty calls on nuclear weapon states (NWS) 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.”³ While the wording of this Article is vague, and has been contested by some of the nuclear weapon states as not conferring a strict legal obligation to disarm, it has nevertheless come to be interpreted by most states as a clear call for nuclear disarmament. This view was reinforced by the 1996 International Court of Justice Advisory Opinion on the legality of nuclear weapons. Today, there is little contention that this Article imposes an obligation on the nuclear weapon states to disarm; regardless of the vagueness of the wording, that nuclear disarmament appears to be linked to a treaty on “general and complete disarmament”, and that no date has been specified for nuclear disarmament, we do not hear states challenging the disarmament interpretation of Article VI. Indeed, for the first time in the 30 year history of the NPT, all the NPT nuclear weapon states in 2000 gave an ‘unequivocal undertaking’ to accomplish the total elimination of nuclear weapons.⁴ Moreover, the implied ‘bargain’ of the NPT suggests very clearly that nuclear weapon states ‘owe’ the non-nuclear weapon states (NNWS) the elimination of their arsenals, that disarmament (on the part of the NWS) is the flip side of the non-proliferation (on the part of the NNWS) coin.

None of this is to suggest that disarmament alone can achieve non-proliferation; no one is suggesting that if the nuclear weapon states move to zero, this in itself means that we will be freed of the danger of proliferation. Rather, what is argued is that the two-tiered system that prevails in the NPT, whereby some states are allowed nuclear weapons while others are denied them, is not sustainable in the longer term. It is clear that arguing against proliferation carries more moral and political authority if the arguer is seen to be abiding by the same rules. In this sense, Obama reflects a view not shared by the Bush Administration, which instead preferred to build a system where some states (the US included of course) would be seen as ‘responsible’ nuclear powers, deserving of their arsenals, while others, usually because of their ‘rogue’ nature, would be denied these. Under this attempt, what was being stigmatized was not the weapon itself, but rather the possessor of the weapon. This attempted reformulation of the NPT’s provisions was not, however, received well by the majority of states. The long-standing

taboo against nuclear weapons – the recognition of their huge destructive power – risked being diluted if it was only the nature of a possessing state that was to be at issue. The US was not therefore ultimately successful in seeking to make a special case for itself (and the other existing nuclear weapons states of Russia, China, Britain, France, and presumably India, Pakistan and Israel) retaining nuclear weapons. Indeed what is notable about the momentum towards the disarmament of nuclear weapons that has gathered since the early 1990s is that it is being pursued vigorously by a broad range of states, many of them allies and close political partners of the United States. (The governments of Australia, Japan, Norway and Canada are the most obvious activists in this issue).⁵

In addition to the view that disarmament was a necessary, but not sufficient, condition for non-proliferation, and that the two-tiered system of the NPT could not be sustained in perpetuity was the recognition that the US (and others) would be in a far stronger position to challenge suspected proliferators if it was seen to be moving towards a position of zero itself. This is a key reason why Obama has flagged his ambition of nuclear disarmament so clearly: although his critics accuse him of idealism (a somewhat unfair claim, given that he acknowledges the difficult and very slow nature of a nuclear disarmament project) his positioning of the US as a global disarmer reduces the political space in which any other would-be proliferator can operate. It seems clear that Obama's intention is to limit the political capital that North Korea, Iran or any other critic of the US might gain by pointing to a continuation of nuclear 'double standards'.

This is one reason why he has pursued a replacement for the START Treaty, and instigated some subtle changes in the wording of nuclear postures, together with a commitment not to develop new nuclear weapons, in the recently released US Nuclear Posture Review⁶ (although many argue that Obama could have gone much further in amending US policy). No doubt these measures, together with his April 2009 speech in Prague and his chairing of a special session of the UN Security Council

on nuclear weapons elimination, will have a positive effect on the way that the NPT Review Conference proceeds.

The question remains however of whether these initiatives will be enough to carry the day at the RevCon. Initially, it was hoped that by May 2010, 16 months into his term, Obama would have succeeded in achieving Senate ratification of the CTBT, as well as of the new START agreement. But these predictions underestimated the degree of resistance the President would meet from the Republican Party, seemingly intent on preventing most legislation from moving forwards. It is also worth remembering that for Obama, and certainly for most Americans, foreign policy is probably low down on his list of things to do; for most, reform of the health care system and tending to financial woes were the real priorities. Given this, and especially the fact that Obama could not command the supermajority of 67 votes needed to pass the CTBT through the Senate, he was wise not to attempt this. Another defeat of this important treaty, as happened in 1999, would have been far worse than arriving without it in New York, as Obama will be forced to do.

For the non-nuclear weapon states, the issue will be this: will the completion (but not ratification) of the START agreement, the new wording of the Nuclear Posture Review, and Obama's own personal commitment to 'nuclear zero' be sufficient to sustain an atmosphere of goodwill during the RevCon? Is his distinct rejection of Bush Administration policies enough to convince member states that he is serious about disarmament (the lack of a US ratified Comprehensive Test Ban Treaty notwithstanding)?

If, as seems likely most states will recognise his personal commitment to disarmament, this will go some way towards reducing the kind of criticism of US nuclear policies that has prevailed for the past decade or so. It will also, presumably, assist the US in isolating and putting pressure on suspect states like Iran to roll back any nuclear weapon intentions they might harbor. If he is able to achieve this, and if he later can bring about CTBT ratification, as well as ratification of the all-

important START treaty, then we will be able to say that the NPT's disarmament objectives are beginning to be met.

This is because while the mantle for nuclear disarmament rests heavily on the shoulders of the US, even small moves towards disarmament will have an impact on the other nuclear weapon states. China would almost certainly follow the US in ratification of the CTBT, in turn allowing for movement on the part of other non-signing states. Russia, for its part, is very keen to reduce its nuclear weapons and is desirous of the entry into force of the new START agreement.⁷ Britain and France have both expressed support for Obama's push for zero (more volubly so in the UK than in France) and any increasing momentum over the next decade or so will undoubtedly have some authoritative influence on the positions of the non-NPT nuclear weapon states: India, Pakistan and Israel. None of this is to under-estimate the very real difficulties that lie in the way of nuclear disarmament or the fact that this process, if it occurs at all, is likely to take decades to complete. But what it does suggest is that the log-jam in implementing identified steps towards disarmament, might be beginning to clear, even if this will be at a pace far slower than initially expected. In this sense, the NPT Review Conference might not be able to bring out a radically new or progressive final document but it will, with luck, benefit from the positive statement and small moves towards disarmament already made evident by the new US Administration.

There are further elements that would assist the road to disarmament, and which could be incorporated into the NPT process. Australia, together with 16 other states, has submitted a Working Paper – *Further Strengthening the Review Process of the Treaty on the Non-Proliferation of Nuclear Weapons* – which proposes changing the preparatory conferences, typically held every year for three years prior to any Review Conference, into a system of Annual General Conferences and one preparatory conference.⁸ This would have the effect of all states meeting every year to discuss disarmament and non-proliferation issues under the NPT, allowing for greater assessment of progress made and for improvements in implementation. The paper also proposed the creation of a Chairs' Circle, to utilise the accumulated wisdom of RevCon Chairs,

as well as a Treaty Support Unit. In particular, the plan for yearly review meetings would go a long way towards keeping disarmament and non-proliferation in the spotlight and focusing attention on violations or specific problem areas. Australia, together with Japan, has submitted a further Working Paper – *A New Package of Practical Nuclear Disarmament and Non-proliferation Measures for the 2010 Review Conference* – which reaffirms the 13 steps outlined in previous years, but which also adds some useful new areas for implementation.⁹

A further instrument able to assist disarmament within the NPT is the report of the International Commission for Nuclear Non-proliferation and Disarmament, co-chaired by Australia and Japan. It calls for the delegitimizing of nuclear weapons, and for nuclear reductions to take place in a two-phase process, with reductions down to 2000 weapons by 2025, a ‘minimization point’, after which time states would proceed to negotiate the complex and difficult steps towards the complete elimination of nuclear weapons.¹⁰ The Report has gathered significant attention and has been presented to member states at the Review Conference. If implemented, it will reinforce the 13 steps plan and previous reports and studies designed to advance disarmament. Other studies have suggested specific recommendations to the United States and others, with many emphasizing the important role that nongovernmental actors can also play in enhancing the prospects for disarmament.¹¹

In sum, the 2010 Review Conference is likely to mirror the renewed hopes visible at a global level for achieving nuclear weapons disarmament, largely because of the new commitment shown by the United States, a commitment which has been supported by other NPT nuclear weapon states. As noted however, the expectations of this meeting should not be inflated. There are some useful measures that can be achieved, most importantly perhaps a sense that disarmament needs to be a joint endeavour, requiring commitment and good will for many years; it will be important for member states to work collaboratively both in the NPT and individually to foster this goal. There is more to be gained by contributing to an on-going and collaborative atmosphere

than there is by focusing on the continued lack of actual treaties, such as the CTBT or a ratified START agreement. At the very least, new US policies will go some way towards reducing the bitter divisions that existed so strongly five years ago, something which in turn should reassure US policymakers, and which with luck will carry over into the 2015 Conference.

¹ For detailed analysis of the 2005 Review Conference, see Rebecca Johnson, 'Politics and Protection: Why the 2005 Review Conference Failed', *Disarmament Diplomacy*, 80, Autumn, 2005, Joseph Cirincione, 'Failure in New York', interview, 7 June 2005; <http://www.carnegieendowment.org/npp/publications/index.cfm?fa=view&id=17042>

² Cirincione, op.cit.

³ Text of the NPT, available at the United Nations website:

http://www.un.org/disarmament/WMD/Nuclear/pdf/NPTEnglish_Text.pdf

⁴ Cited in Tariq Rauf, 'An Unequivocal Success? Implications of the NPT Review Conference', *Arms Control Today*, July/August 2000. Available at

http://www.armscontrol.org/act/2000_07-08/raufjulaug

⁵ Marianne Hanson, 'The Advocacy States: Their Role Before and After the US Call for Nuclear Zero', *The Nonproliferation Review*, 17(1), March 2010, pp.71-93.

⁶ Most important here was the US pledge not to use nuclear weapons against non-nuclear states in compliance with the NPT. See 'Obama Limits When US Would Use Nuclear Arms', *New York Times*, 5 April 2010, available at

<http://www.nytimes.com/2010/04/06/world/06arms.html>

⁷ Yet Russia, too, faces difficulty in achieving ratification of this treaty.

⁸ *Further strengthening the review process of the Treaty on the Non-Proliferation of Nuclear Weapons*, Working Paper submitted by Canada, Australia, Austria, Chile, Germany, Ireland, Italy, Japan, Mexico, the Netherlands, New Zealand, Nigeria, Poland, Sweden, Switzerland, Thailand and Ukraine, May 2010.

Available at <http://www.reachingcriticalwill.org/legal/npt/revcon2010/papers/WP4.pdf>

⁹ *The New Package of Practical Nuclear Disarmament and Non-proliferation Measures for the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons*, Working paper submitted by Australia and Japan, May 2010. Available at

<http://www.reachingcriticalwill.org/legal/npt/revcon2010/papers/WP9.pdf>

¹⁰ *Eliminating Nuclear Threats: a Practical Agenda for Global Policy Makers*, Report of the ICNND, December 2009. Available at

<http://www.icnnd.org/reference/reports/ent/downloads.html>

¹¹ A key example is the Carnegie Endowment for International Peace (CEIP) publication, by Deepti Choubey, *Restoring the NPT: Essential Steps for 2010* CEIP, 2009.

Flaws in the Nuclear Non-Proliferation Treaty

Richard Broinowski*

This commentary considers tensions in the NPT regime between permissible peaceful use of nuclear fission and preventing the spread of nuclear weapons.

The two main aims of the Nuclear Non-Proliferation Treaty are to prevent the proliferation of nuclear weapons and to grant adherents the ‘inalienable right’ to nuclear technology for peaceful purposes, including the rights to enrich or purchase uranium enriched in the isotope U235. I will argue that these are fundamentally incompatible objectives, but before doing so, it is useful to outline non-proliferation manoeuvres that preceded the Treaty.

Even before the atom bombings of Hiroshima and Nagasaki in early August 1945, scientists in the Manhattan project had been urging the American government not to drop the bomb on Japan. In 1942, Leo Szilard had told President Roosevelt that peace was not possible if various sovereign states had atom bombs. In 1944, atomic scientists at the University of Chicago advocated the creation of an international administration with police powers ‘to effectively control the means of nucleonic warfare’. In 1945, a joint statement by American, British and Canadian scientists argued to their governments that there was no defence against nuclear weapons, and no country could maintain a monopoly over nuclear technology.

Plans to prevent nuclear weapons proliferation while propagating so-called ‘peaceful’ nuclear technology gathered momentum during the late 1940s and early 1950s. In 1946, the newly formed United Nations General Assembly met in London and created an Atomic Energy Agency charged with ensuring atomic energy could only be used for peaceful purposes. Meanwhile, US Secretary of State Dean Acheson and David

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Lilienthal of the Tennessee Valley Authority proposed to President Truman that the United States retain a monopoly on uranium enrichment, but distribute 'denatured' fissile materials to countries wishing to pursue peaceful nuclear technology. A self-promoting American hardliner appointed by President Truman to manage the issue, Bernard Baruch, rejected the Acheson-Lilienthal plan and proposed that the United States retain its nuclear weapons monopoly until nuclear weapons held by other countries, particularly the Soviet Union, were verifiably destroyed. Soviet Foreign Minister Gromyko rejected Baruch's demand, and proposed the United States destroy its nuclear arsenal first.

The United States had no such intention, and clung to the hope that it could keep its nuclear weapons secrets from the rest of the world, particularly how to separate the fissionable uranium isotope U235 from U238, and how to create and detonate Plutonium 239. But as the Soviets and British, and then the Swiss, Swedish and French all moved towards developing their own nuclear technology, the Americans, no doubt seeking supporters in the Cold War, suddenly switched from secrecy to openness in the hope of maintaining control over further proliferation. In December 1953, President Eisenhower announced his 'Atoms for Peace' program, which included training foreign nuclear engineers and scientists at the new American School of Nuclear Science and Engineering at Argonne in Illinois, and giving research reactors to nascent nuclear research establishments on other countries.¹ Driving his agenda was the speculative view of American nuclear scientists that nuclear weapons technology could be adapted to constructive uses, to drive ships and aircraft, enhance human health through radiation therapy and diagnostic procedures, increase agricultural production and food preservation, track soil erosion, dredge canals and create harbours, find geothermal fields, and above all, generate cheap electricity. The genie was out of the nuclear bottle.

The idea of a nuclear non-proliferation treaty (NPT) was an American and Soviet reaction to the first French atomic test in the Sahara in February 1960. For the first time in history, a country had developed its

own bomb independently and against the wishes of the super powers. The driving motive of Washington and Moscow in pushing the Treaty was the desire to ensure that other countries, particularly West Germany, did not also become nuclear weapons states. But the Germans did not wish to be so constrained, and their motive was to keep a nuclear option open within the Treaty's framework, liberalise the use of plutonium for so-called commercial purposes and water down safeguards of the International Atomic Energy Agency (IAEA). Between 1961 and 1974, German politicians assailed the proposed Treaty. Konrad Adenauer called it a 'death sentence' for the Federal Republic. Franz Josef Strauss said it was 'a new Versailles of cosmic dimensions'. Helmut Schmidt regarded it as 'questionable'. The German newspaper *Bild* characterised the proposed Treaty as a 'Dictat of the atomic giants'.²

This obduracy was shared by other European states and Japan. The strength of opposition became clear to an Australian mission keen to sell uranium to world markets in 1977. Travelling on Prime Minister Fraser's instructions to explain Australia's new bilateral safeguards regime that would in future apply to all shipments of Australian uranium, the mission went to London, Rome, Brussels, Paris, Bonn and Tokyo in June and July 1977. It quickly found that potential customers were unwilling to sign any bilateral safeguards agreement that demanded specific case-by-case Australian approval for the transfer, enrichment or re-processing of Australian originating nuclear material (AONM). Automatic approval for such procedures must be allowed. Fearing that it would lose out on uranium sales during a global uranium glut, the Australian government quickly modified its safeguards by introducing 'programmed' (ie automatic) approval. Over the remaining Fraser years, and throughout the Hawke and Keating administrations that followed, other 'strict' conditions in Australian safeguards were modified one by one in the interests of commercial and international demands.³

German diplomacy, more than the advocacy of any other state, was thus responsible for Article IV of the Treaty which allowed signatories to retain the inalienable right to develop or acquire nuclear technology for

peaceful purposes, including the right to enrich uranium or re-process spent nuclear fuel. This ‘stand-by’ provision gave them the capacity to shift to extensive uranium or plutonium production for military purposes within a period of months if they felt motivated to do so.

Thus we have a fundamental tension, a contradiction, within the framework of the NPT. Article I binds the Nuclear Weapons States (NWS) not to transfer nuclear weapons technology to non-NWS. Article II extracts a promise from the non-NWS not to acquire or develop nuclear weapons technology. Article III extracts a promise from the non-NWS to abide by International Atomic Energy (IAEA) Safeguards. Yet Article IV promotes the inalienable right of all non-NWS to access the full range of so-called peaceful nuclear technology, a technology that is the same as the technology to acquire nuclear weaponry. The American academic Albert Wohlstetter once ironically remarked that Article IV gives non-NWS what they regard as ‘a natural right to Life, Liberty and the Pursuit of Plutonium.’ A signatory may develop centrifuges to enrich uranium providing they are subject to IAEA safeguards and are producing substantially less than weapons-grade enriched uranium. Defying heavy suspicions from the United States and Israel about the purpose of its nuclear programs, Iran is nonetheless correct in claiming that as a member of the NPT it has a right to develop an enrichment capacity for ‘peaceful purposes.’ That it may further down the track covertly enrich its uranium to weapons grade or extract weapons grade uranium or plutonium from its reactors will be unlawful under the terms of the NPT, but it can walk away from the Treaty and sanctions will apply too late to stop its technical procedures.

Iraq nearly got away with similar deceptions before the first Gulf War, and when IAEA inspectors discovered the extent to which Saddam had utilised NPT-sanctioned access to nuclear technology for a weapons program, they were shocked. An additional protocol allowing more intrusive inspections of non-NWS nuclear facilities was negotiated as a result, but even this will not stop non-NWS using rights granted under the NPT from pursuing weapons programs if they are determined to do so.

A second tension within the NPT regime is the failure of the five NWS to honour their obligation under Article VI to reduce and eventually abolish their nuclear inventories. This has been interpreted by non-NWS as ignoring a clear and decisive obligation. By failing to act, the NWS are seen as imposing a double standard on the world namely “we are allowed to have nuclear weapons, but you are not”. The NWS have argued in response that they are not subject to time-bound guarantees to disarm, and that they will get around doing so in due course.

But this double standard and access by non-NWS to nuclear technology constitute what the just-retired head of the IAEA, Mohamed ElBaradei has described as the ‘Achilles heel’ of the NPT. At symposia on international safeguards in October 2006 and May 2007, he forcefully argued that inherent security risks exist in a world of multiple ‘virtual Nuclear Weapon States’. He advocated a new international or multinational approach to the nuclear fuel cycle so as to avoid ending up with not just nine, but 20-30 additional states which will have the capacity to develop nuclear weapons in a very short span of time.⁴

The enthusiasm with which the international nuclear industry has embraced nuclear technology as the only way to save the world from global warming is misguided and premature and ignores alternative soft-energy paths.⁵ Due to the enormous capital costs of new nuclear reactors, component supply log jams, lack of community acceptance, national skepticism⁶ and the unreliability of construction estimates, a sudden burst in their construction around the world is still a long way off. Meanwhile the total number of nuclear power reactors on line in the world is continuing to shrink.⁷ Nor have technical problems involved in isolating spent nuclear fuel from the biosphere for the required thousands of years been achieved. And according to authoritative articles in the *Bulletin of the Atomic Scientists*, the optimistic talk about the safety and immunity from weapons diversion of Generation IV or pebble-bed or thorium-fuelled reactors is theoretical. Most designs are still fuelled by paper and moderated by ink. As for claims that mixed oxide fuels from re-processing irradiated fuel rods from light water

reactors can be used in breeder reactors to ‘burn up’ weapons-grade uranium or plutonium, practical application is lacking.⁸

A third tension within the NPT concerns the fiction that ‘peaceful’ electricity-generating nuclear reactors cannot be used for making nuclear weapons. Most existing light-water reactors do not produce fissile material at the end of a normal operating cycle. But if the fuel rods are removed before the end of the cycle, they will contain fissionable plutonium, Pu 239, that has not yet had time to convert to less weapons-effective Pu 240 or 241. The plutonium and unused uranium 235 can under such conditions be separated during reprocessing from actinides and other transuranic elements in the fuel rods, and used in nuclear weapons. A new generation of reactors – including Generation IV, pebble-bed or thorium-fuelled – are claimed by the nuclear industry and uranium miners to be much safer than earlier reactors. But they still produce spent fuel containing the same fissionable products capable of separation through reprocessing for use in weapons.

In the early 1960s, President John F. Kennedy predicted that by the mid-1980s, fifteen to twenty countries would possess nuclear weapons. He was too pessimistic. By 2010 only nine countries have such weapons – the five NWS, three countries which acquired them as non-NPT signatories – India, Pakistan and Israel – and North Korea, which could arguably be seen as still an NPT member because it did not formally resign, despite walking away from the Treaty in 2009. Iran, another NPT signatory, may become the tenth nuclear weapons power, although if and when this happens is uncertain.

Meanwhile some recent events indicate that we may not yet be ineluctably drifting towards life in a comprehensively nuclear-armed world. In 2007, four eminent and conservative Americans - George Schultz, Henry Kissinger, William Perry and Sam Nunn argued in the *Wall Street Journal* for much more assertive action to reduce nuclear arsenals and work towards a non-nuclear world. In June 2008 an International Commission on Nuclear Non-Proliferation was set up, and

with a heterogeneous bunch of participants from Mexico, Indonesia, Britain, China, the United States, Germany, India, Pakistan, France, South Africa, Russia and Saudi Arabia, co-chaired by two former Foreign Ministers – Gareth Evans from Australia and Yoriko Kawaguchi from Japan. In March 2010 it tabled its package on nuclear disarmament, a conservative reiteration of support for three nuclear ‘pillars’: disarmament, a stronger NPT regime and expanded peaceful nuclear technologies.

In April 2010, President Obama signed with Russian President Medvedev a new START weapons reduction treaty to ‘re-set’ bilateral relations by cutting American and Russian nuclear weapons, missiles and launchers by about a third. Obama announced these moves to a cheering Czech crowd in Prague the same month and foreshadowed his new Nuclear Posture Review (NPR) which reaffirmed an earlier pledge of the United States that it would not use nuclear weapons against non-NWS which adhered to their obligations under the NPT. Later in April he convened a Nuclear Security Summit in Washington, where the representatives of 47 countries focused on the challenge of securing vulnerable nuclear materials, particularly from terrorist threats.

Taken together, these developments offered the impression that international progress was being made towards nuclear disarmament and the eventual abolition of nuclear weapons. As a result, the 2010 NPT Review Conference, convening at the beginning of May 2010, began in an optimistic frame of mind and might well conclude without dissolving in the kind of acrimony and lack of progress that marked the 2005 Review Conference.

Yet there is still a long way to go. Over the last two decades, some countries such as Libya, South Africa, Argentina and Brazil have judged that their best national security interests lie in not pursuing a nuclear weapons option. Three former members of the Soviet Union – Ukraine, Belarus and Kazakhstan – similarly decided not to retain nuclear weapons left on their territory by Moscow following the 1989 break-up of the Soviet Empire. The trick will be to persuade threshold countries

like Iran that pursuing nukes is not in their best national interests -or to have them arrive at this conclusion themselves.

Meanwhile, some sort of international acknowledgement about the proliferation dangers of expanding global nuclear power must be made. This will involve changing the NPT's undertaking to present nuclear technology as an inalienable right. An urgent change to the NPT would be to exclude both enrichment and re-processing of nuclear fuel from that right, even if this would create another class of privileged countries such as non-NWS like Japan that already possess and exercise such technology. To withdraw such technology would be strenuously resisted in Tokyo, but not to do so would make it all but impossible to deny the same rights to other countries less advanced in nuclear technology. In this context, Obama's proposal for an international enrichment and re-processing resource under IAEA supervision might make sense.

¹ Broinowski, *Fact or Fission? The Truth About Australia's Nuclear Ambitions*, P.34, Scribe Publications, Victoria,2003.

² Matthias Kuntzel, 'Germany and the Origins and History of the NPT', in *Beyond the Bomb*, Transnational institute, WISE and Greenpeace International, Amsterdam, 1995.

³ Broinowski, *Fact or Fission? The Truth About Australia's Nuclear Ambitions*, Chapters 7 and 8, Scribe Publications, Victoria,2003.

⁴ Mohamed ElBaradei, 'Preventing nuclear catastrophe: where do we go from here?' Address to Luxembourg Forum, 24 May 2007

⁵ See Mark Diesendorf's *The Base load fallacy, and other fallacies disseminated by renewable energy deniers*. Energy Science Coalition, Briefing Paper 16, Revised March 2010.

⁶ Many developing countries which the nuclear industry claims want nuclear reactors, like Vietnam and Burma, do not have the grid capacity to absorb such large inputs of energy. Of those that do, Australia, Norway, Malaysia and Thailand have hostile or passive governments, Egypt and Israel have major proliferation concerns, Poland has economic concerns, and Indonesia has a hostile local environment.

⁷ Nuclear reactors worldwide generated 370,000Mw in 2009, 1,600 Mw less than 2008. In 2009, there were 435 operating reactors, nine less than in 2002. Fifty two units are currently listed by the IAEA as under construction or planned, compared to 233 at the peak of reactor growth in 1979. Forty two additional new reactors would have to be started up by 2015 even to maintain the global nuclear share of power. *Source: IAEA.*

⁸ See for example Bulletin of the Atomic Scientists, May/June 2006: *Mountain of Waste*; July/August 2007: *Plans for new Nukes*; November/December 2007: *A clear-eyed look at nuclear power risks*; Sept/October 2008: *The future of nuclear energy*.

The Nuclear Policy of the Obama Administration

Dr Andrew Newman*

President Obama has embraced an ambitious nuclear agenda and has already taken several important steps toward realising his goals. He has signed a strategic arms reduction treaty with Russia, chaired a UN Security Council session that led to the adoption of a sweeping nuclear security resolution and hosted a nuclear summit dedicated to securing all vulnerable nuclear material around the world within four years. The President has also committed to “seek the peace and security of a world without nuclear weapons”, ratify the Comprehensive Test Ban Treaty, negotiate an end to the production of fissile material for weapons and promote the safe and secure development of nuclear energy both domestically and internationally.

This commentary will look at President Obama’s policy in four sections: promoting nuclear disarmament; preventing nuclear proliferation; improving nuclear security; and promoting peaceful uses of nuclear energy.

Promoting Nuclear Disarmament

On 24 September 2009, President Obama chaired a session of the UN Security Council (UNSC) which culminated in the unanimous adoption of UNSC Resolution 1887. 1887’s main provisions provide a good overview of the Obama Administration’s priorities: a revitalized commitment to work toward a world without nuclear weapons;¹ a strengthened Nuclear Nonproliferation Treaty (NPT); better security for nuclear weapons materials to prevent acquisition by terrorists; full compliance by Iran and North Korea with Security Council resolutions. But it also backs the development of peaceful uses of nuclear energy in a framework that reduces proliferation risk and gives support for key

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nuclear agreements such as START follow-on, the Comprehensive Nuclear Test Ban Treaty, the Fissile Material Cut-Off Treaty, the Convention for the Suppression of Acts of Nuclear Terrorism and the Convention on the Physical Protection of Nuclear Materials and its 2005 Amendment.²

A first step toward realizing these goals was taken on 8 April 2010 with the signing, by Presidents Obama and Medvedev, of a New Strategic Arms Reduction Treaty (New START). New START limits are ‘modest’ but probably the best that could be hoped for given what will be a contentious U.S. Senate ratification debate. To give New START context, the Strategic Offensive Reductions Treaty (SORT or the ‘Moscow Treaty’) signed by Presidents Bush and Putin on 24 May 2002 set aggregate nuclear warhead limits of 1700-2200 by 31 December 2012. This represented a roughly two thirds reduction from the warhead levels permitted each side under the 1991 Strategic Arms Reduction Treaty (START 1). However, the reductions were less than they appeared as no limits were placed on ‘non-deployed’ warheads. Thus warheads could be placed in storage rather than destroyed and ‘uploaded’ again at any time.

The New START limits, to be reached within seven years, are as follows:

- 1,550 warheads;
- 800 deployed and non-deployed Intercontinental Ballistic Missile (ICBM) launchers, Submarine-Launched Ballistic Missile (SLBM) launchers and heavy bombers equipped for nuclear armaments; and
- 700 deployed ICBMs, SLBMs and heavy bombers equipped for nuclear armaments.

The 1,550 warhead limit is 30 percent lower than its predecessor but New START, like the Moscow Treaty, gives each side substantial ‘upload’ capacity as it is silent on warheads in storage and counts each heavy bomber as carrying one warhead regardless of how many it can actually carry.³

New START limits are calibrated to the Nuclear Posture Review (NPR), which provides a roadmap for U.S. nuclear strategy and was released on 6 April 2010. Beyond the reliance on the Stockpile Stewardship Program (extending the life of nuclear weapons rather than developing new nuclear warheads) and the centrality now attached to preventing nuclear terrorism, the 2010 NPR is not a departure from the past.⁴ The five key objectives identified in the NPR were all shared by previous administrations: preventing nuclear proliferation and nuclear terrorism; reducing the role of U.S. nuclear weapons in U.S. national security strategy; maintaining strategic deterrence and stability at reduced nuclear force levels; strengthening regional deterrence and reassuring U.S. allies and partners; and sustaining a safe, secure, and effective nuclear arsenal.

The President has committed to “immediately and aggressively pursue U.S. ratification” of the Comprehensive Test Ban Treaty (CTBT) banning nuclear testing. The Clinton Administration failed to organize an effective campaign in support of the Treaty and the Senate voted against ratification in 1999; the George W. Bush Administration opposed CTBT. This is likely to prove a particularly heavy lift given scarcity of political capital⁵ and skepticism in Congress, particularly amongst influential members such as ranking member of the Senate Foreign Relations Committee Republican Richard Lugar and Senate Republican whip Jon Kyl, about the merits of the CTBT. And U.S. domestic politics is only one part of the equation: China, Egypt, India, Indonesia, Iran, Israel, North Korea and Pakistan must also ratify the treaty before it can enter into force.

The Administration also intends to seek a new treaty that verifiably ends the production of fissile material intended for use in nuclear weapons: a Fissile Material Cut-off Treaty (FMCT). But the likelihood of successfully negotiating a FMCT is even more remote than ratifying the CTBT. India and Pakistan are not interested in limiting fissile material production and the intractability of Iran on enrichment makes a cut-off look even less realistic. Also working against FMCT is the combination of releasing the NPR (which was not embraced by many Republicans),

getting New START ratified, the nuclear security summit, NPT Review and G8 meeting, which together will likely produce ‘nuclear fatigue’ in an increasingly partisan Washington D.C. FMCT becomes an even bigger reach if CTBT ratification is also aggressively pursued.

Preventing Nuclear Proliferation

The 2005 Nuclear Nonproliferation Treaty (NPT) Review Conference has been described as “the biggest failure in the history of this Treaty.”⁶ Due to fundamental disagreements between member states, it took ten days for an agenda to be adopted and no substantive final document was presented at the concluding plenary. There has been intense activity at the Preparatory Committee meetings to ensure that the 2010 Review Conference does not suffer the same fate.

The Administration is placing particular emphasis on discouraging member states from using the NPT withdrawal provision (Article X) in order to avoid penalties for violating the Treaty. North Korea is the model and it is feared that Iran has similar intentions. An important mechanism for avoiding this sort of breakout is the NPT’s Additional Protocol. The Additional Protocol grants expanded rights of access to information and sites in order provide assurances about both declared and possible undeclared activities. Pakistan, Israel and North Korea have not signed the protocol; Iran, India and Belarus have signed but the agreements are not yet in force. The U.S. delegation will be pushing hard for all member states to sign and bring the Additional Protocol in to force as well as “real and immediate consequences” for NPT violators and those trying to withdraw from the treaty “without cause”.

Another topic of great importance for the United States will be the chronically underfunded International Atomic Energy Agency (IAEA). The Administration is asking for more resources and more authority to strengthen international inspections. The IAEA receives funding chiefly from two sources: annual base rate contributions (derived from the scale used by the United Nations to assess member contributions) and voluntary contributions. The Obama Administration has requested from

Congress a \$79.5 million voluntary contribution for fiscal year (FY) 2011 – an increase of \$17 million over the FY 2009 Bush Administration budget. But the United States cannot and should not be expected to carry the load by itself. It is the responsibility of all members to provide the Agency with the funding and other tools it needs to conduct its work. It is instructive that in 2009, following intense U.S. lobbying, the IAEA received its first budget increase above inflation since 2003. According to *Reuters*, the Board of Governors agreed to a 5.4% boost after “six months of tortuous talks.”⁷ If the IAEA is to effectively carry out its safeguards mission and assist newcomers to develop responsible and sustainable nuclear power programs – according to the IAEA, more than 60 countries are considering incorporating nuclear power into their energy portfolios – member states will need to do better than 2.7 percent above inflation after six months of debate.

Improving Nuclear Security

On 5 April 2009 in Prague, President Obama announced his administration’s goal of securing all vulnerable nuclear material around the world within four years. After getting off to a slow start – no additional funding for nuclear security was requested in FY 2010 – the Administration has begun to turn words into deeds. The FY 2011 budget request, if fully funded by Congress, would increase funding for all programs dedicated to improving controls on nuclear weapons, material and expertise from \$707 million to \$1.018 billion. Of particular note, the request includes a 67% funding increase from \$334 million to \$559 million for the Department of Energy’s Global Threat Reduction Initiative to expand the removal of highly enriched uranium (HEU) from sites around the world and accelerate security upgrades for HEU-fueled research reactors and radiological materials and a 8% funding increase from \$300 million to \$325 million for the Department of Energy’s Material Protection, Control and Accounting programs; and the newly proposed \$74 million Global Nuclear Lockdown program at the Department of Defense which would, amongst other things, establish regional nuclear security “centers of excellence” to provide

training, host workshops and exchange best practice on modern security and accounting procedures and equipment.⁸

From 12-13 April in Washington D.C., the Nuclear Security Summit dedicated to strengthening nuclear security and reducing the threat of nuclear terrorism was attended by leaders from 47 nations and three international organisations – the largest gathering of heads of state called by a U.S. leader since the San Francisco conference founded the United Nations in 1945. The summit communiqué endorsed key U.S. objectives such as: securing all vulnerable nuclear material in four years; invigorating national efforts to improve security and accounting of nuclear materials; and converting HEU-fueled reactors to low enriched uranium. An accompanying work plan detailed the specific steps needed to achieve the communiqué’s goals. A follow-on summit has been scheduled for 2012 in South Korea to assess progress and set new goals.

Promoting Peaceful Uses of Nuclear Energy

During a 2004 speech at the National Defense University, President George W. Bush called for the Nuclear Suppliers Group to refuse to sell enrichment and reprocessing equipment and technologies to “any state that does not already possess full-scale, functioning enrichment and reprocessing plants.”⁹ However, critics claimed that this objective was undermined by the then-Department of Energy’s Global Nuclear Energy Partnership, which relaxed some of the more restrictive language in its Statement of Principles after it became clear that countries like France and Japan would not join if their preferred methods of reprocessing were not permitted and others such as Canada and Australia expressed concern that membership would commit them to *never* develop enrichment facilities, a potentially lucrative value-add for countries with large natural uranium reserves.

The Obama Administration’s “new framework” for civil nuclear cooperation also emphasizes preventing the further spread of technology relevant to nuclear weapons development. A centerpiece of this framework to ensure that countries have access to nuclear energy for

peaceful purposes while minimizing the risks of proliferation is the creation of an international fuel bank, which would maintain a low-enriched uranium stockpile to support nations that choose not to build indigenous nuclear fuel cycle capabilities. On 29 March 2010, the IAEA and Russia signed an agreement to establish such a reserve for supply to IAEA member states that will be located in Angarsk, Russia. While the fuel bank is meant as a supplier of last resort – the commercial nuclear fuel market functions efficiently – it is hoped that the reserve will reassure countries tempted to develop domestic enrichment and fuel fabrication facilities due to concerns that future fuel supplies may be cut off for political reasons. The Administration has also expressed interest in the provision of “cradle-to-grave” nuclear management services to newcomers by countries that already possess fuel cycle facilities.

Conclusion

The Obama Administration has put the ‘nuclear’ issue on the front burner. The nuclear security and disarmament agenda is ambitious and the upcoming NPT Review Conference, the June Global Initiative to Combat Nuclear Terrorism annual conference and the joint meeting of the G8 and G20 also in June, provide important opportunities to maintain the momentum and expand the engagement. Obama has already called for a ten year and \$10 billion extension of the G8’s effort to stop the spread of WMD and an expansion of those efforts to countries not previously eligible for assistance.¹⁰

It has been reported that the third NPT Preparatory Committee meeting, held in May 2009, was “a much-needed success story, with much of the credit given to the Obama administration's more positive approach to multilateral diplomacy and arms control”.¹¹ But the extent of the divide between the nuclear weapon states and a large number of the non-nuclear weapon states should not be underestimated. Problems that bedeviled the 2005 Review Conference remain; in particular, how to treat nuclear outliers: India, Pakistan, Israel and North Korea. In addition, the lack of international consensus on dealing with Iran’s nuclear program and the U.S.-India civilian nuclear cooperation

agreement – inherited from the Bush Administration and supported by the current Administration as well as the Nuclear Suppliers Group – will further complicate negotiations at the Review Conference.

It is unlikely that the states that maintain the U.S. and Russia are not living up to their Article VI obligation to “pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race” will be won over by New START but modest reductions are better than none and it is a step in the right direction, particularly given how strained U.S.-Russian relations have been in recent years. It also remains to be seen how the non-nuclear weapon states respond to the Administration’s commitment to a nuclear weapons-free world. But the Obama Administration has raised the public profile nuclear disarmament, nonproliferation and security. The key now is to ensure continued high-level international buy-in.

¹ A January 2008 editorial in *The Wall Street Journal* by former Secretary of State George Schultz, former Secretary of Defense William Perry, former Secretary of State Henry Kissinger and former chairman of the Senate Armed Services Committee Sam Nunn helped to create the domestic political space for the Administration to launch its ‘world without nuclear weapons’ objective. See Schultz, Perry, Kissinger and Nunn, “Toward a Nuclear-Free World,” *The Wall Street Journal*, 15 January 2008, at http://www.nuclearsecurityproject.org/atf/cf/%7B1FCE2821-C31C-4560-BEC1-BB4BB58B54D9%7D/TOWARD_A_NUCLEAR_FREE_WORLD_OPED_011508.PDF

² The White House, Office of the Press Secretary, *Fact Sheet on the United Nations Security Council Summit on Nuclear Nonproliferation and Nuclear Disarmament UNSC Resolution 1887*, 24 September 2009, at http://www.whitehouse.gov/the_press_office/Fact-Sheet-on-the-United-Nations-Security-Council-Summit-on-Nuclear-Nonproliferation-and-Nuclear-Disarmament-UNSC-Resolution-1887/.

³ For example, the U.S. B-52H can carry up to 20 Air-Launched Cruise Missiles and the Russian Tu-95MS16 Bear can carry up to 16 cruise missiles. My thanks to Hans Kristensen, Director of the Nuclear Information Project at the Federation of American Scientists, for providing these figures.

⁴ Much has been made of the so-called “softening” of the U.S. nuclear deterrent posture in terms of assurances for non-nuclear weapon parties to the NPT in compliance with their obligations that use chemical or biological weapons against the United States or its allies and partners. While it is true that the document specifies a devastating

conventional military response, the NPR provides an out-clause in the very next paragraph: “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.” The U.S. continues to maintain a role for nuclear weapons in deterring CBW attack by nuclear weapon states and states not in compliance with their NPT obligations. Department of Defense, *Nuclear Posture Review Report*, 6 April 2010, p. viii, at <http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf>

⁵ A healthy amount of political capital has already been expended on health care reform and the financial bailout and more will be needed to get New START ratified.

⁶Harald Müller, *The 2005 NPT Review Conference: Reasons and Consequences of Failure and Options for Repair*, The Weapons of Mass Destruction Commission, Paper No. 31 at <http://www.wmdcommission.org/files/No31.pdf>

⁷ Mark Heinrich, “Struggling UN atom watchdog gets rare budget boost,” *Reuters*, 3 August 2009, at <http://in.reuters.com/article/oilRpt/idINL385520090803>

⁸ On the administration’s nuclear security budgeting, see Matthew Bunn, *Securing the Bomb 2010: Securing All Nuclear Materials in Four Years* (Cambridge, Mass., and Washington, D.C.: Project on Managing the Atom, Harvard University, and Nuclear Threat Initiative, April 2010), p.82-85, at http://www.nti.org/e_research/Securing_The_Bomb_2010.pdf. The President’s Prague speech can be found at http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered/

⁹ The White House, Office of the Press Secretary, “President Announces New Measures to Counter the Threat of WMD,” Washington, D.C., 11 February 2004, at <http://georgewbush-whitehouse.archives.gov/news/releases/2004/02/20040211-4.html>

¹⁰ In 2002, the G8 committed \$20 billion over 10 years to fund nonproliferation projects, mainly in Russia. The United States agreed to contribute half of the funding total.

¹¹ Rebecca Johnson, “Enhanced Prospects for 2010: An Analysis of the Third PrepCom and the Outlook for the 2010 NPT Review Conference,” *Arms Control Today*, Vol. 39, No.5, June 2009, at http://www.armscontrol.org/act/2009_6/Johnson

Australia's Nuclear Policy Options— Past, Present, and Future? Andrew O'Neil*

Overview

This policy brief focuses on Australia's policy options in the nuclear realm in a global context where demand for nuclear energy is at unprecedented levels and the integrity of the non-proliferation regime is facing severe challenges. In a rapidly evolving international environment, Australian governments may have to confront some uncomfortable policy choices in the years ahead, including whether Australia continues to export uranium, whether it continues to reject the consumption of nuclear energy, and the extent to which Australia remains committed to not pursuing the option of nuclear weapons acquisition.

Australian nuclear policy: contemporary settings

The costs for Australia resulting from the use of nuclear weapons anywhere in the world would be significant; the economic, security, and political impact on Australia of even the most limited use of nuclear weapons in Asia would be monumental. The likely implications of a nuclear exchange—widespread destruction of social well-being, massive economic dislocation, and the devastation of regional order—would have substantial and enduring implications for Australia's national interests.

Largely as a consequence of this realisation, since the early 1970s, stopping the proliferation of nuclear weapons capabilities to states and non-state actors across the international system has been a core objective of Australia's strategic policy. Crafting effective strategies to combat global proliferation has been a key task of successive Labor and

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Liberal-National Party governments, and a considerable amount of Australia's limited diplomatic resources have been committed to nuclear non-proliferation.

Yet for much of the post-1945 period, successive Australian governments were not particularly concerned with the spread of nuclear weapons capabilities worldwide. Like a number of other middle powers that would later become active proponents of nuclear non-proliferation, Australia remained favourably disposed towards nuclear weapons in the 1950s and 1960s. The primary reason for this was that Australia—like a number of other countries in the international system—wanted to keep its options open. A strong supporter of the US and UK weapons programs, the Menzies Coalition government had explored the possibility of having British nuclear weapons stationed on Australian territory. Under the Gorton government, serious thought was given to developing an indigenous Australian capability.¹ Coupled with genuine concerns about the impact of a new nuclear safeguards system on Australia's commercial nuclear interests, this resulted in an unwillingness to ratify the Nuclear Non Proliferation Treaty (NPT) following its entry into force in 1970.

Not until the advent of the Whitlam Labor government in 1972 did Australia commit itself formally to renouncing the acquisition of nuclear weapons. While the Whitlam government exhibited a strong commitment to nuclear non-proliferation domestically and internationally, the brevity of its time in office meant that it never developed detailed policies and an integrated diplomatic strategy in this area. This was left to the Fraser government, which confronted a range of new nuclear-related challenges after it assumed office in late 1975, including how to ensure that the development of Australia's national nuclear industry complemented the global non-proliferation commitments made by the previous government.

The Fraser government's decision to approve the resumption of Australian uranium exports in 1977 was accompanied by the first detailed statement of Australia's non-proliferation policy and the

emergence of an active strategy in the area of nuclear diplomacy. With occasional readjustments, these settings have essentially been maintained under Labor and Coalition governments ever since. The underlying themes of Australia's approach to nuclear issues—the importance of multilateral initiatives, a strong focus on Asian nuclear dynamics, middle power activism, and the nexus between security of nuclear supply and safeguards—have remained remarkably consistent over the past three decades. Of all the various dimensions of Australian foreign policy, opposition to the proliferation of nuclear weapon enjoys, arguably, the highest degree of bipartisanship among all political parties.

Writing in 1975, Hedley Bull made the point that “Australia’s ability to promote [nuclear] arms control arrangements relevant to her security is very limited; the success or failure of attempts to achieve these arrangements depends more on the policies of other countries than upon Australia”.² Australia may have global interests, but it is not a global power. The stakes for Australia in limiting the number of nuclear weapons powers worldwide, particularly in Asia, are very high but its influence remains limited. This helps to explain the strong preference on the part of governments for multilateral approaches to non-proliferation, particularly the use of UN sponsored institutions.

Australia’s involvement in international nuclear issues has been shaped largely by the various regulatory frameworks underpinning global nuclear interactions. Over the past four decades, the NPT and its assorted satellite initiatives—particularly those in the nuclear export control realm—have been integral to achieving many of Australia’s nuclear policy goals. Should the operation of these regulatory frameworks be seriously compromised, Australian policy makers would be forced to operate in an environment inimical to the interests of weaker powers in the international system. As Allan Gyngell has noted, Australia has a long-standing preference for multilateral approaches to dealing with key foreign policy challenges, which in turn mirrors a belief that “as a middle-sized power, Australia alone cannot shape the world and that the country’s interests are best served by encouraging the

development of international norms and laws that would help balance Australia's relative weakness".³

As it has evolved since the mid 1970s, Australia's nuclear policy has been shaped overwhelmingly by clear-cut material considerations. This is not to overlook the role that normative factors have played in influencing the opinions of elites—the principles and norms embodied in the NPT have undoubtedly reinforced the commitment of Australian policy elites to the goal of non-proliferation. But they have not been the dominant, or even a major, determinant of Australia's non-proliferation activity. In short, "ideational" influences have been marginal in shaping Australian nuclear diplomacy. What, then, have been the factors driving Australia's engagement in this area of public policy?

First and foremost has been the imperative of preventing other states in Asia from acquiring nuclear weapons capabilities. Central to this is a belief that proliferation in the region will have deleterious implications for Australia's security and economic interests by undermining the regional equilibrium through the promotion of instability. Even if one assumes there is minimal prospect of nuclear weapons actually being used, their operational deployment can still have destabilising effects on regional security dynamics. In addition to preventing the spread of nuclear weapons in the region, Australian policy makers have also had a strong desire to avoid making decisions about military force structure in response to proliferation. In the contemporary environment, such decisions can be effectively deferred in the context of US extended deterrence for its Asian allies, including Australia. As the 2009 Australian Defence White Paper noted:

[F]or as long as nuclear weapons exist, we are able to rely on the nuclear forces of the United States to deter nuclear attack on Australia. Australian defence policy under successive governments has acknowledged the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance. That protection provides a stable and reliable sense of

assurance and has over the years removed the need for Australia to consider more significant and expensive defence options.⁴

Yet even if we accept that the credibility of US extended deterrence is watertight, there is no guarantee that the US will continue to extend its nuclear deterrent to Australia in an era where Washington is raising the barriers to nuclear use.⁵ From the perspective of strategic policy makers, the potential for such a scenario unfolding makes preventing further proliferation in Asia a key policy imperative. While Australia could conceivably manufacture its own indigenous nuclear deterrent to respond in-kind to nuclear weapons acquisition in Asia (see discussion below), it is difficult to imagine any Australian government that would not want to avoid such an extreme review of force structure.

The second rationale underpinning Australia's active nuclear policy has been economic. Labor and Coalition governments appreciate that the optimum international environment for Australian uranium exports—which account for approximately \$500 million in income per annum—is one where the overwhelming majority of countries remain committed to forswearing the acquisition of nuclear weapons through membership of the NPT. A central theme in the pronouncements of governments since the 1970s has been that Australian uranium exports play a critical role in strengthening global non-proliferation measures because Australia insists on particularly stringent preconditions for export, the most salient of which is a state's membership of the NPT and its acceptance of full-scope International Atomic Energy Agency (IAEA) safeguards. Any unravelling of the NPT, and the non-proliferation regime more broadly, would inevitably decouple the link between uranium exports and non-proliferation goals in Australian policy. It would, in short, undermine one of the central declared justifications for uranium exports. Were the NPT to collapse and the world experience a substantial jump in the number of nuclear weapons states—with the prospect of more to come, especially in Asia—it would acutely problematic for governments to justify the export of Australian nuclear fuel internationally.

Third, broader political considerations cannot be underestimated as a factor in Australia's nuclear policy. Governments on both sides of the spectrum have appreciated the political benefits to be gained domestically of being *seen* to bolster Australia's international profile on nuclear issues. There remains a significant and still influential anti-nuclear constituency within the Australian polity that governments, particularly Labor governments, endeavour to reach out to. Linking nuclear non-proliferation with nuclear disarmament has widespread appeal in the Australian electorate and, from the perspective of governments, helps to deflect attention from Australia's export of uranium and the nuclear dimension of the US alliance, something that still divides Australian public opinion. The political dimension is also international in scope. There are distinctive foreign policy benefits for Australia of pursuing nuclear non-proliferation and disarmament, which is recognised as something of a signature campaign for middle power "good international citizens". The utilitarian calculation of sunk costs has also been influential in shaping Australia's diplomatic engagement on nuclear issues, with successive governments acutely aware of past energy expended, resources committed, and national prestige attached to improving and strengthening the non-proliferation regime. This, in itself, continues to be an important motivating element in Australia's activist approach to non-proliferation.

Future nuclear policy options?

Australia's overriding preference is for the maintenance of the international nuclear status quo. The status quo is far from perfect: there have been three new Asian nuclear powers to emerge since the end of the cold war, the global non-proliferation regime has grown increasingly fragile over this time, and nuclear terrorism is perhaps more conceivable than it ever has been. It is, however, important to appreciate that the contemporary nuclear environment for Australia could be a lot worse: the likelihood of deliberate use of nuclear weapons by states is probably lower than at any time since 1945, nuclear-capable states in Asia (e.g. Japan, South Korea) continue to exercise restraint, and the overwhelming majority of states in Asia remain committed to

the NPT and the confidence-building assurances that underpin nuclear safeguards.

As a secondary power, Australia does not have many options to promote a global nuclear environment conducive to its security—Australia’s nuclear policy choices in the years ahead will almost certainly continue to be highly reactive in substance. Given the fluid nature of the international environment, this could make for some interesting shifts in Australian policy. In this sense, as Rod Lyon argues, Australia’s nuclear future in the early part of the twenty-first century is by no means assured:

Australia’s previous patterns of thinking about nuclear weapons and nuclear strategy provide useful insights into its possible future behaviour. Australia’s thinking has traditionally reflected a basic level of ‘fit’ between the existing security environment and its own role in the world. The comfort of that fit has shifted with time, so much so that over the past fifty years Australia has been everything from a possible nuclear proliferator, to a supporter of extended nuclear deterrence, to an important advocate of nuclear arms control. Those previous shifts suggest Australia’s twenty-first nuclear identity might not yet be fixed.⁶

Australia’s nuclear policy settings in the contemporary context are based on three broad commitments: continuing involvement in the nuclear fuel cycle as a supplier of uranium; the rejection of nuclear energy consumption; and the disavowal of nuclear weapons. It is important to emphasise that none of these are set in stone and any of them could be subject to close review in the event of significant shifts in Australia’s external environment.

Involvement in the nuclear fuel cycle as a supplier of uranium

As noted, Australia's continuing role as a supplier of uranium is closely linked to the ongoing coherence of the non-proliferation regime. From a domestic political perspective, the export of Australian uranium has never been justifiable on purely economic grounds: a key argument on the part of export proponents has been that if Australia chooses to opt out of the global market as a supplier, the gap will be filled by less scrupulous suppliers who will not be as focused on insisting on wide ranging nuclear safeguards as a precondition of export. From this perspective, Australia is able to leverage its status as an attractive source of supply under long term contract arrangements—due largely to its stable political system and track record of sound economic management—to promote wider adherence to the non-proliferation regime.

The expansion of the international civilian nuclear energy market, particularly in Asia, presents enormous commercial opportunities for Australian uranium exporters, with one analyst identifying more than thirty states worldwide that plan to construct nuclear reactors for the first time.⁷ However, the increasingly brittle nature of the global non-proliferation regime raises questions about the sustainability of Australia's role as a major nuclear supplier. North Korea's acquisition of nuclear weapons, the apparent drive from Iran to become a threshold nuclear weapons state, and the lack of engagement on the part of all other nuclear weapons states (besides the US, Russia, and the UK) with meaningful arms control and disarmament initiatives raises some serious issues for the credibility of the NPT as a proliferation-containment mechanism. If the upward trend in nuclear proliferation since the end of the cold war continues, the non-proliferation regime will effectively disintegrate over the next two decades, if not sooner. If this happens, Australia will find it very difficult—indeed probably impossible—to sustain its role as a nuclear fuel supplier in an environment where robust regulatory frameworks for international nuclear transactions no longer apply.

Rejection of nuclear energy consumption

The Rudd government's unconditional rejection of nuclear energy consumption for Australia has been one of the defining features of its approach to nuclear issues since coming to office. While the previous Howard government held a relatively open-minded attitude to the issue following the release of the landmark 2006 Switkowski nuclear review—the recommendations of which endorsed the limited pursuit of nuclear power options—Prime Minister Rudd has remained adamant that the risks associated with nuclear power, coupled with Australia's "multiple energy sources", disqualify it from serious consideration.⁸ This position enjoys widespread support in the Australian polity, and there are only very few (most prominently the chair of the board of the Australian Nuclear Science and Technology Organisation, Ziggy Switkowski) who have been willing to openly challenge the government's position. Even the nuclear industry in Australia has been conspicuously low-key on the issue. The government's policy position seems broadly reflective of public ambivalence in relation to nuclear energy consumption.

Yet, developments in this area could evolve very quickly. Public opposition in Australia to nuclear power would harden considerably in the event of a major nuclear accident at a civilian plant anywhere in the world. Equally, however, strong popular support for nuclear power production in Australia could develop rapidly in the event of dramatically accelerated climate change impacts over a short period. Aside from disagreement over the security risks of building and maintaining nuclear reactors, there is continuing debate about whether the necessary infrastructure for nuclear power production could be built quickly enough to make a difference in mitigating the effects of climate change.⁹ Against a background where Australia's demand for electricity is reportedly set to double by mid century and where Australia's carbon emission reduction targets are becoming increasingly ambitious every year, the nuances of such a debate could quickly become superfluous if evidence of exponential climate change impacts emerge. According to projections by the IPCC, exponential impacts could be manifested in significant rises in temperature to 2.6 degrees above 1990 levels over the

next three decades.¹⁰ An even more sobering possibility is abrupt climate change of the type that triggered the end of the last Ice Age—an increase in global temperatures by 5 degrees over a single decade.¹¹

Disavowal of nuclear weapons

For most analysts, the idea of a nuclear-armed Australia is something that belongs to the history books and has no place in this country's twenty-first century strategic discourse. Indeed, it seems a fantastic—and faintly Strangelovian—postulation that Australia could well feel the need to review its status as a non-nuclear weapons state in the coming decades. Yet, contrary to common belief, Australia could well achieve a threshold nuclear weapons status if the decision was taken to go down this path. It is one of several technologically advanced countries in Asia (along with Indonesia, Japan, South Korea, and Taiwan) to possess proficiency in nuclear fuel cycle technologies *and* a historical track record of voicing sympathy for the weapons option. Discussion over the potential of Australia becoming a nuclear weapons state—or at the very least achieving a threshold nuclear capability—has never disappeared entirely from the national strategic discourse. Throughout the 1970s and 1980s, successive defence strategy planning documents broached the issue of threshold status and on at least one occasion, the issue was raised in discussions among senior ministers.¹² While the topic dropped away from view for most of the 1990s, it has experienced something of a mini-resurgence—in public and private discussions—within the Australian strategic studies community over recent years.

Like the nuclear power production issue, it would take a dramatic series of events for Australia to review its non-nuclear weapons status. However, for policy makers to *begin* actively exploring the weapons option would require the intersection of a greater number of variables than required in the case of nuclear energy consumption. These variables, occurring in isolation, would probably not be sufficient to precipitate such a radical shift in Australian strategic planning. They would have to coalesce to yield an unprecedented, “game changing” security environment for Australia. The following sorts of variables

would be required to trigger a shift towards nuclear weapons in Australia's strategic posture. The first would be the rapid proliferation of nuclear weapons and/or superior conventional war-fighting capabilities in countries which Australia regards as a possible security threat. The second would be a serious loss of confidence in the credibility of extended deterrence guarantees (either nuclear or conventional or both) from the United States. And the third would be a direct threat to Australia's vital sovereign interests, an existential threat of the type that Stephan Fruhling has described.¹³

All of these specific scenarios are, of course, feasible, but they would themselves be a corollary of broader shifts in the international system: e.g. a retreat in America's global role, the breakdown of regional security order in Asia. It should be of little comfort to Australian policy makers that these are potential outcomes over which they would have almost no control.

Conclusion

The international nuclear environment will continue to evolve in ways that challenge Australian policy makers. Choices about uranium exports, the consumption of nuclear energy and, possibly, the option of a threshold weapons capability will confront decision makers in the years ahead. The global non-proliferation regime may continue to exist on paper in formal terms, but the regime could conceivably suffer a terminal decline in the event that Iran follows North Korea down the nuclear weapons path. The regime has provided a key political and strategic framework for Australia's engagement in the nuclear fuel cycle over the past forty years: Australia will undoubtedly struggle in a global environment where a coherent regulatory mechanism for nuclear affairs ceases to be effective.

¹ For background, see Jim Walsh, "Surprise Down Under: The Secret History of Australia's Nuclear Ambitions", *The Nonproliferation Review*, 5(1), 1997, pp. 1-20.

² Hedley Bull, "Australia and the Nuclear Problem: Some Concluding Comments", in Robert O'Neill (ed.), *The Strategic Nuclear Balance: An Australian Perspective*, Strategic and Defence Studies Centre, Australian National University, 1975, p. 143.

³ Allan Gyngell, "Australia's Emerging Global Role", *Current History*, March 2005, p. 100.

⁴ Department of Defence, *Defending Australia in the Asia Pacific Century: Force 2030*, Commonwealth of Australia, Canberra, 2009, p. 50. Emphasis added.

⁵ In its 2010 Nuclear Posture Review, the Obama administration formally committed the US "not to 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". See US Department of Defense, *Nuclear Posture Review Report*, Washington DC, 2010, p. viii.

⁶ Rod Lyon, "Australia: Back to the Future?", in Muthiah Alagappa (ed.), *The Long Shadow: Nuclear Weapons and Stability in 21st Century Asia*, Stanford University Press, Stanford, 2008, p. 429

⁷ Sharon Squassoni, "Nuclear Renaissance: Is It Coming? Should It?", *Carnegie Endowment for International Peace Policy Brief*, 10, 2008, p.1.

⁸ "Labor Rejects Nuclear Power in Australia", *The Sydney Morning Herald*, 17 February 2010.

⁹ See, for instance, Katherine Ling, "Nuclear Power Cannot Solve Climate Change", *Scientific American*, 27 March 2009. Available at: <http://www.scientificamerican.com/article.cfm?id=nuclear-cannot-solve-climate-change> (last accessed 14 April 2010).

¹⁰ Leon Fuerth, "Security Implications of Climate Change Scenario 2: Severe Climate Change Over the Next Thirty Years", in Kurt Campbell (ed.), *Climatic Cataclysm: The Foreign Policy and National Security Implications of Climate Change*, Brookings Institution Press, Washington DC, 2008, p. 134.

¹¹ Ministry of Defence (UK), *The DCDC Strategic Trends Programme: 2007-2036*, 3rd edition, Ministry of Defence, London, 2007, p. 78-79.

¹² In his memoirs published in 1996, Bill Hayden (Foreign Minister in the Hawke Government from 1983-88) revealed that in 1984 he had broached "with a very small group of Ministers", including, presumably the Prime Minister, the option of Australia attaining a threshold nuclear weapons capability. He was careful to note, however, that "nothing was subsequently done about the proposal" See Bill Hayden, *Hayden: An Autobiography*, Harper Collins, Sydney, 1996, pp. 422-23.

¹³ See Stephan Fruhling, "Never Say Never? Considerations About the Possibility of Australia Acquiring Nuclear Weapons", *Asian Security*, 6 (forthcoming).

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