

Nuclear Collisions: Discord, Reform & the Nuclear Nonproliferation Regime



Essay by Steven E. Miller

Responses by Wael Al-Assad, Jayantha Dhanapala,
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Preface

Nearly all of the 190 signatories to the Nuclear Non-Proliferation Treaty (NPT) agree that the forty-two-year-old treaty is fragile and in need of fundamental reform. But gaining consensus on how to fix the NPT will require reconciling the sharply differing views of nuclear weapon states and non-nuclear weapon states. Strengthening the international rules is increasingly important as dozens of countries, including some with unstable political environments, explore nuclear energy. The result is an ever-increasing distribution of this technology.

In this volume, Steven E. Miller (Harvard University), Codirector of the Academy's Global Nuclear Future (GNF) Initiative, outlines the main points of contention within the NPT regime and identifies the issues that have made reform so difficult. How these deep divergences can be managed, minimized, or overcome is a crucial question for the future—and a focus of the American Academy's GNF project.

For more than five decades, the American Academy of Arts and Sciences has played an integral role in nonproliferation studies, beginning with a special issue of *Daedalus* on arms control published in 1960. Today, the GNF Initiative is examining the safety, security, and nonproliferation implications of the global spread of nuclear energy. Through innovative scholarship and behind-the-scenes interactions with international leaders and stakeholders, the Initiative is developing pragmatic recommendations for managing the emerging nuclear order.

The GNF Initiative is supported in part by grants from Carnegie Corporation of New York, The William and Flora Hewlett Foundation, The John D. and Catherine T. MacArthur Foundation, the Alfred P. Sloan Foundation, the Flora Family Foundation, and Fred Kavli and the Kavli Foundation. The Academy is grateful to these supporters and to the principal investigators for the Initiative: Steven E. Miller, codirector; Scott D. Sagan, codirector (Stanford University); Robert Rosner, senior advisor (University of Chicago); and Stephen M. Goldberg, research coordinator (Argonne National Laboratory). I want to express my thanks to the authors for advancing the work of the Initiative.

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Nuclear Collisions: Discord, Reform & the Nuclear Nonproliferation Regime

Steven E. Miller

International legal regimes depend on consent. Making and enforcing rules requires that states accept legal limits on their behavior and that they allow their behavior to be audited by some enforcement body. International legal scholar Michael Glennon offers a clear articulation of the volitional nature of international legal regimes:

The international legal system cannot compel a state to subscribe to a rule unless it consents to do so. It cannot adjudicate the application of a rule to a state unless the state has accepted the jurisdiction of the tribunal to apply the rule. It cannot enforce a rule against a state unless the state has consented to the rule's enforcement.¹

Even when states have accepted a set of rules, Glennon further elaborates, they still have the option of withdrawing their consent. The viability, durability, and adaptability of treaty regimes, therefore, depend on the attitudes and perceptions of the states that participate in the arrangement. Without assent from member states, a treaty regime cannot survive or adapt.

The problem of consent is particularly challenging in the context of the Nuclear Non-Proliferation Treaty (NPT) and its associated regime. This regime has an oddly schizophrenic history. On the one hand, it has attracted nearly universal membership, its critical importance is routinely acknowledged, it has proven to be durable and resilient across four challenging decades, and it is given at least some credit for helping prevent the widespread proliferation of nuclear weapons. On the other hand, it is chronically troubled, beset by crises and setbacks and possible defections, amidst fears for its future and doubts about its adequacy.

1. Michael J. Glennon, *The Fog of Law: Pragmatism, Security, and International Law* (Palo Alto, Calif.: Stanford University Press, 2010), 135.

Precisely because of its perceived value as an impediment to the spread of nuclear weapons, there has long been worry about the wounds the NPT regime has suffered and the threats to its health and long-term durability. Writing more than a decade ago in the aftermath of the 1998 Indian and Pakistani nuclear tests, Joseph Cirincione lauded the “remarkable” performance of the NPT system; but he lamented, “The regime has sustained serious setbacks and defeats; there may very well be more in the near future; and there remains a distinct possibility of a catastrophic collapse of the regime.”² Thus the paradox of the NPT: crucial but fragile, resilient but menaced, effective but potentially inadequate.

Today the NPT regime is widely regarded as a system in distress. It is commonly described as troubled, jeopardized, derailed, unraveling—eroding under the pressure of unresolved compliance crises, inadequate enforcement, diplomatic friction and distrust, spreading nuclear technology, and member-state dissatisfaction. There are mounting concerns about the regime’s effectiveness as a barrier to the proliferation of nuclear weapons. To many, the failure of the NPT system to prevent North Korea’s acquisition of nuclear weapons and to resolve the endless controversy over Iran’s advancing nuclear program is a disturbing symptom of the imperfection of the regime. As Pierre Goldschmidt has explained:

Today’s nuclear nonproliferation regime is increasingly challenged by states that exploit ambiguity in the rules and rifts in the international community to pursue nuclear weapon capabilities without fear of reprisal. At present, lax and inconsistent compliance practices threaten nonproliferation efforts by giving some states more leeway for evading rules than should be tolerable in an effective nonproliferation regime.³

Not surprisingly, this state of affairs leads to pessimistic conclusions about the health of the NPT regime. French expert Camille Grand, for example, writes that these trends define “the emerging nuclear disorder.”⁴ Similarly, Graham Allison warns that “[t]he current global nuclear order is extremely fragile” and that it is marked by “growing cynicism about the nonproliferation regime.” He concludes that the trends are “currently pointing toward catastrophe.”⁵ In November 2009, the International Commission on Nuclear Non-proliferation and Disarmament, comprised of fifteen distinguished international figures headed by Gareth Evans and Yoriko Kawaguchi, echoed this worried perspective when it declared itself to be “deeply concerned about the present vulnerability of the nonproliferation regime.” The Commission also pointed to the obvious remedy,

2. Joseph Cirincione, “Historical Overview and Introduction,” in *Repairing the Regime: Preventing the Spread of Weapons of Mass Destruction*, ed. Joseph Cirincione (New York: Routledge, 2000), 5.

3. Pierre Goldschmidt, *Concrete Steps to Improve the Nonproliferation Regime*, Carnegie Papers No. 100 (Washington, D.C.: Carnegie Endowment for International Peace, April 2009), 1.

4. Camille Grand, “The Nonproliferation Treaty in an Era of Crises,” in *Nuclear Weapons after the 2010 NPT Review Conference*, ed. Jean Pascal Zanders, Chaillot Papers No. 120 (Paris: European Union Institute for Strategic Studies, April 2010), 16.

5. Graham Allison, “Nuclear Disorder: Surveying Atomic Threats,” *Foreign Affairs* 89 (1) (January/February 2010): 2, 7, 12.

urging that “it is of paramount importance that [the NPT regime] be systematically strengthened.”⁶

Even if the most alarming interpretations of the current health of the NPT regime are discounted, there remain questions about its future adequacy given the significant rise in interest in pursuing nuclear power. Dozens of countries around the world are exploring the nuclear power option. Though interest in nuclear power has been dampened following the nuclear accident in Fukushima, Japan, some states will continue to expand nuclear power, and a number of additional states will proceed down the nuclear path for the first time. Moreover, weakened demand for nuclear power in some countries with established nuclear industries (such as Japan and Germany) may compel nuclear vendors to rely more heavily on exports, producing a buyer’s market for nuclear technology and services.⁷ These considerations raise the prospect of a much wider global distribution of nuclear technology—including possibly to countries less stable and into hands less reassuring than the existing roster of states with nuclear assets. Hezbollah, to offer one striking example, has reportedly suggested that Lebanon should follow Iran’s path in pursuing nuclear power.⁸ The expansion and spread of nuclear power could lead to dangers ahead if steps are not taken to ensure that the NPT regime is able to effectively regulate a more nuclearized world.

Thus, two significant pressures suggest the need for reform to strengthen the NPT system: to correct existing deficiencies and weaknesses in the regime and to ensure that the regime remains adequate even if there is expansion and spread of nuclear technology in the future. In response to these pressures, a substantial agenda of NPT-related reforms has emerged over the past decade.⁹ But here we run head-on into the problem of consent. Enthusiasm and support for the reform agenda have been uneven. Few measures command universal support. Small numbers of key states oppose some proposed steps. Other potential measures inspire wide opposition and even repudiation; indeed, large constellations of states (such as the Non-Aligned Movement) reject or dispute substantial portions of the reform agenda. Reforms regarded as self-evidently desirable in Western nonproliferation circles meet with strong resistance. Restrictions that some states impose on others (for example, stronger export controls) are met with bitter resentment and criticism. Progress toward NPT reform, when it has occurred, has been slow, difficult, and diplomatically bruising. The consent from states parties necessary to strengthen the NPT regime has not been readily forthcoming and in some contexts has been lacking altogether.

6. *Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers* (Canberra and Tokyo: International Commission on Nuclear Non-proliferation and Disarmament, November 2009), 38.

7. See, for example, Henry Sokolski, “The Post-Fukushima Arms Race?” *Foreign Policy*, July 29, 2011. Sokolski suggests that Japan’s nuclear industry in particular will face large pressures to export given the disruption of its domestic market.

8. “Hezbollah Chief Says Lebanon Needs Nuclear Energy,” *Tehran Times*, August 26, 2010, http://www.tehrantimes.com/index_View.asp?code=225620. The comment was attributed to Hezbollah Secretary General Sayyid Hassan Nasrallah.

9. An excellent discussion of a number of the possible reforms is found in Goldschmidt, *Concrete Steps to Improve the Nonproliferation Regime*.

To some extent, this reality is a natural by-product of a nearly universal regime of 189 member states that operates on a consensus basis. Winning over the entire diverse international system to accept a new norm, rule, or interpretation is no small task. In some instances—for example, with respect to the Additional Protocol to Safeguards Agreements aimed at increasing transparency—some states join and some do not, resulting in a divided system in which states are governed by different sets of accepted obligations. Commonly, the hope is to attract more and more adherents until the practice or rule is so widely accepted as to be normative. This logic assumes, however, that states believe their interests will be served by perpetuating the regime and strengthening it in ways that typically reduce their options and increase their obligations. In today’s discontented era, this logic may not always be powerful. As Ian Anthony explains:

A significant number of legal and technical innovations developed to strengthen the nonproliferation regime in recent years are not being applied and used to the degree that is desirable even though they are potentially powerful tools. One hypothesis to explain why that should be is that states are unwilling to bear the cost of applying these tools in support of the NPT because they see less and less advantage to themselves in working actively to strengthen the nonproliferation regime.¹⁰

Anthony questions whether states see self-interest in pursuing the NPT reform agenda. Disgruntled states that believe their interests are not being served within the NPT system will have little incentive to take (often self-sacrificing) steps to strengthen the regime. This in turn can undermine the ability of the regime to function effectively or to reform. As Jayantha Dhanapala has warned, “Diplomacy must be informed by a political will to make the NPT work. Absent that political will the NPT cannot be sustainable.”¹¹

But still there is a puzzle. Countries that have joined the NPT as non-nuclear weapon states (NNWS)—a category that includes nearly every state in the international system—must believe that forgoing nuclear weapons is compatible with their national interests. They probably also believe that they, and the world, are better off if fewer nuclear weapons and fewer nuclear weapons states (NWS) exist in the international system. Why then would they object to strengthening the regime? On what grounds would they judge that efforts to improve the regime are contrary to their interests? Why isn’t there a powerful common interest in building a stronger and more robust regime?¹²

10. Ian Anthony, “Managing the Transfer of Nuclear Technologies Under the NPT,” in *Nuclear Weapons after the 2010 NPT Review Conference*, ed. Zanders, 27.

11. Jayantha Dhanapala, “Planning for the 2010 NPT Review Conference: A Practitioner’s Overview,” *Pugwash Issue Brief* 6 (1) (March 2010): 12.

12. For an interesting exploration of this issue, see Andrew J. Grotto, “Why Do States that Oppose Nuclear Proliferation Resist New Nonproliferation Obligations? Three Logics of Nonproliferation Decision-Making,” *Cardozo Journal of International and Comparative Law* 18 (1) (Winter 2010).

The answer lies partly in the fact that the NPT system cannot be disconnected from the international system of which it is a part. The rivalries, antagonisms, disagreements, and contentions that mark interstate relations inevitably cast their shadow on the functioning of the NPT regime. But a large part of the explanation has to do with varying understandings of the NPT system itself. States have different conceptions of the essential meaning and purpose of the NPT regime. They have different perceptions of its adequacy and fairness, its flaws and weaknesses. And given this diversity of views about the state of the NPT system, it is not surprising that states respond differently to proposed reforms of the regime; they do not agree on diagnoses of the NPT's problems, and hence do not share the same reform agenda.

This essay maps out the main lines of contention within the NPT regime, identifying the differences in conception, diagnosis, and prescription that have bedeviled NPT diplomacy and have made reform of the regime so halting and difficult. The future of the NPT regime will be heavily shaped by these colliding visions. Understanding the divergences is an important step in assessing why desired reforms meet with resistance, what reforms might be feasible, and how these differences might be overcome.

COMPETING CONCEPTIONS OF THE NPT REGIME

How Many Pillars?

The NPT is built around three pillars: nonproliferation, disarmament, and peaceful uses of nuclear technology. There are notable differences, however, in perceptions of the relative importance of the three pillars. One view, common in Western nonproliferation circles, holds that the core rationale and principal purpose of the NPT is to prevent the spread of nuclear weapons. In this view, the existence of the three pillars is generally acknowledged, but the other two are regarded as secondary and less essential. Conservative analyst Baker Spring has articulated this view with unusual clarity: "The NPT is designed, first and foremost, to prevent the spread of nuclear weapons. The other two elements of the treaty are not really pillars at all; they are subordinate clauses under the central purpose of nuclear nonproliferation."¹³ This sentiment is not often put so plainly, but it is the implicit foundation for many perspectives and policies. What really matters is nonproliferation. The NPT is properly regarded as an instrument for restraining the spread of nuclear weapons. This is its role in the nonproliferation policies of many states, including notably the United States.

This nonproliferation-centered view of the NPT regime collides with a widely held contrary belief that the NPT consists of three coequal pillars that together constitute the core bargain of the treaty. In this conception, NNWS

13. Baker Spring, "The Misleading Messages from the Nonproliferation Treaty Review Conference," Heritage Foundation Web Memo No. 2924, June 3, 2010, 1.

agreed to forfeit their rights to nuclear weapons in return for guarantees of their rights to peaceful nuclear technologies and promises that the NWS would eventually eliminate the discrimination built into the NPT by genuinely working toward nuclear disarmament. This triangular bargain balances sacrifice with benefit and imposes obligations on NWS and NNWS alike. Hence, to many NNWS, the disarmament and peaceful technology pillars are at least as important to their understanding of the NPT and its value to their interests as the nonproliferation pillar. Furthermore, in the balance between disarmament and nonproliferation, the instinct of the NNWS is nearly the opposite of the Western focus on nonproliferation. As William Potter and Gaukhar Mukhatzhanova state in their pioneering study of the Non-Aligned Movement (NAM), “Broadly speaking, the Movement remains united in the conviction that the ultimate goal of the NPT is nuclear disarmament. . . . Unlike nuclear disarmament, nonproliferation was never a central tenet of the Non-Aligned Movement.”¹⁴

Given these different perspectives on the pillars of the NPT, a hallmark of NPT diplomacy from the very beginning of the regime has been contention over the fulfillment by the NWS of the Article VI disarmament obligation and recurring frictions over the right of access of NNWS to the entire nuclear fuel cycle. A large number of NPT member states seem committed to the proposition that all three pillars are integral to the regime and that no one pillar should be privileged at the expense of others. As expressed in the working paper submitted by the NAM to the 2010 NPT Review Conference, “[T]he balanced implementation of the three pillars of the NPT, in a nondiscriminatory manner, remains essential for its effectiveness in realizing its objectives.”¹⁵

Core Bargain or Design Flaw?

The tensions occasioned by disagreements over the relative importance of the three pillars of the NPT are exacerbated by a further reality: those who embrace the primacy of the nonproliferation pillar do not necessarily view the other two pillars merely as subordinate or token elements of the regime. Rather, those pillars are often seen as unfortunate and undesirable—as mistakes to be corrected, loopholes to be closed, or complications to be avoided or minimized. The nuclear disarmament obligation is simply incompatible with the centrality of nuclear weapons in the eyes of states that possess them and is impossible to square with the apparent desire of the NWS to retain their nuclear weapons for the indefinite future. The need for the NWS to defend their nuclear policies in the face of sustained and occasionally intense criticism by other NPT members is at best an inconvenience and an irritant. At worst, in the view of some critics, this need to appear to respect Article VI is damaging because it pushes NWS in unwanted

14. William Potter and Gaukhar Mukhatzhanova, *Principles vs. Pragmatism: The Non-Aligned Movement and Nuclear Politics* (London: Routledge, forthcoming 2012), chap. 3, pp. 1–2. All page numbers cited for this source are from a manuscript version of the book.

15. Working Paper Presented by the Group of Non-Aligned States Parties to the 2010 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons, 2; hereafter referred to as NAM Working Paper.

directions—many in the U.S. Senate regard, for example, the Comprehensive Test Ban Treaty (CTBT) in this way—or causes nuclear policy to be influenced or deformed by an unrealizable disarmament delusion.¹⁶ The NWS seek to finesse the issue by paying rhetorical homage to the disarmament obligation and by arguing that their occasional arms control agreements or unilateral reductions constitute “good faith” efforts to observe Article VI.

There is no indication, however, that any NWS is committed to achieving nuclear disarmament on any politically relevant time frame. Indeed, the NWS have failed even to complete the intermediate near-term steps, such as the CTBT or the Fissile Material Cutoff Treaty (FMCT), that have been called for in the NPT context and identified as indicators of meaningful progress toward disarmament. Nevertheless, many states—“the vast majority of non-nuclear countries”—take the disarmament pillar seriously, wish to see steps in that direction taken by the NWS, and have not been mollified by the arguments and excuses of the NWS.¹⁷ Here, then, is a fundamental collision of interests at the center of the NPT regime: for the foreseeable future, the NWS are not prepared to do what the majority of NPT member states wish them to do and believe they are legally obligated to do.¹⁸

Spreading or Limiting Nuclear Technology?

The disconnect is even greater when it comes to the peaceful uses of nuclear energy. In Western nonproliferation thinking, this pillar is often regarded as a fundamental “regime imperiling”¹⁹ flaw in the treaty, one that contradicts the essential nonproliferation purpose of the regime.²⁰ The treaty seeks to limit the spread of nuclear weapons while facilitating the spread of nuclear power technology, including those dual-use capabilities that possess inherent relevance to the acquisition of nuclear weapons. But the nonproliferation mission of the NPT regime can be directly undermined if sensitive nuclear technologies are acquired in connection with nuclear power programs. As an early, influential analysis ex-

16. For a concise articulation of the view that disarmament is delusional, see Matthew Kroenig, “Nuclear Zero? Why Not Nuclear Infinity?” *The Wall Street Journal*, July 30, 2011.

17. Grand, “The Nonproliferation Treaty in an Era of Crises,” in *Nuclear Weapons after the 2010 NPT Review Conference*, ed. Zanders, 19.

18. For extensive discussion of the implications of the Article VI dispute, see Sverre Lodgaard, *Nuclear Disarmament and Non-Proliferation: Towards a Nuclear-Weapon-Free World?* (New York: Routledge, 2010); and Steven E. Miller, “Proliferation, Disarmament, and the Future of the Nonproliferation Treaty,” in *Nuclear Proliferation and International Security*, ed. Sverre Lodgaard and Morten Bremer Maerli (New York: Routledge, 2007), 50–70.

19. This phrase is drawn from Christopher A. Ford, “Nuclear Technology Rights and Wrongs: The Nuclear Nonproliferation Treaty, Article IV, and Nonproliferation,” in *Reviewing the Nuclear Nonproliferation Treaty*, ed. Henry Sokolski (Carlisle, Penn.: Strategic Studies Institute, U.S. Army War College, 2010), 241.

20. See, for example, Itty Abraham, “Contra-Proliferation: Interpreting the Meaning of India’s Nuclear Tests in 1974 and 1998,” in *Inside Nuclear South Asia*, ed. Scott D. Sagan (Palo Alto, Calif.: Stanford University Press, 2009), 107. Abraham writes of “[b]asic flaws in the NPT architecture, especially the weakness of its primary trade-off—making civilian and peaceful nuclear technologies available to countries that renounce belligerent uses of nuclear power.”

plained, “Civilian nuclear energy programs now under way assure that many new countries will have traveled a long distance down the path leading to a nuclear weapons capability.”²¹ This is what Jon Wolfsthal has called “the 800-pound gorilla of nuclear security: the weakness of a system that allows governments, in full compliance with their nonproliferation obligations, to produce and possess enriched uranium or separated plutonium, with few assurances that they will not at some point use the material for less-than-peaceful purposes.”²² To those who see the NPT regime narrowly and overwhelmingly as an instrument to prevent the spread of nuclear weapons, this reality represents a massive internal contradiction that sits at the center of the system. And the inevitable conclusion in this line of thought is that nonproliferation priorities should prevail over claimed rights of access to the full panoply of nuclear technology. According to this logic, the NPT’s design flaw should be corrected, or at least minimized, by inhibiting or preventing the spread of those technologies that are most worrisome in terms of nonproliferation. This step would involve applying what Graham Allison has dubbed the rule of “no new nascent nukes”; that is, trade in dual-use technologies that have direct weapons applications should not be permitted.²³

This line of reasoning, regarded as obvious, powerful, and persuasive by Western nonproliferators, is rejected by many NNWS, which regard it not only as flatly contrary to assurances contained in the text of the treaty but as undermining one of the main benefits of NPT accession for NNWS.

Instrument of the NWS or Expression of Collective Interest?

The proliferation-centric view of the NPT regime sees the treaty and its associated regime as a global public good, an expression of a widely shared collective interest in preventing the spread of nuclear weapons and avoiding the emergence of an international order heavily marked by the widespread presence of nuclear weapons. Given this fundamental common interest—the bedrock on which the NPT regime is built—the proliferation-focused view holds that responsible member states should welcome and accept initiatives to improve the regime and should endorse and support efforts to stymie and punish those states that transgress the rules of the NPT system.

The history of international nonproliferation efforts, however, reveals that the story is not that simple. As noted, the nonproliferation steps preferred by Washington, Brussels, or Vienna commonly meet with resistance or rejection from at least some and often many NNWS members of the NPT. The difficult international politics of nonproliferation are partly explained by the fact that the NPT is not universally viewed as a disinterested expression of collective in-

21. Albert Wohlstetter, “Spreading the Bomb Without Quite Breaking the Rules,” *Foreign Policy*, Winter 1976, 144.

22. Jon Wolfsthal, “The Next Nuclear Wave,” *Foreign Affairs*, January/February 2005.

23. Graham T. Allison, “How to Stop Nuclear Terror,” *Foreign Affairs*, January/February 2004.

terests, but rather as an instrument utilized by the major powers—in particular, the United States—to constrain and discipline other states, especially those they do not like. As one Brazilian expert commented in explaining Brazil’s perspective on the NPT system, for example, the regime is seen as a “politically driven tool in the hands of the United States to lay down the law” and reflects an effort by great powers to use international norms “to impose their will on weaker nations.”²⁴ From this perspective, the movement to negotiate the NPT was driven by the shared interest of the United States and the Soviet Union in preserving their distinctive nuclear roles, even at the expense of their own allies. Jayantha Dhanapala voices a representative viewpoint in observing that the NPT, as it emerged from the negotiating process in the 1960s, was “heavily weighted towards NWS interests.”²⁵

What NPT critics from the have-not side of the divide see is not a fair system implemented in an evenhanded fashion but a regime marked by hypocrisy, double standards, and unequal burdens. From this vantage point, the NWS exempt themselves from scrutiny, face few constraints on their behavior, ignore or reinterpret their NPT obligations, break the rules when it serves their purposes, and make exceptions for their friends, while insisting that NNWS be held sternly to account and while proposing that ever greater restraints and obligations be assumed by the NNWS. Similarly, to many in the NAM, the International Atomic Energy Agency (IAEA) is not a neutral and objective technical body but rather, as one analysis puts it, “a politicized instrument of the foreign policy goals of the U.S. and other Western states.”²⁶ This sense of the IAEA as a politicized instrument is reinforced by heavy-handed efforts to pressure the IAEA, to push it in directions that Washington regards as useful, and to press upon it intelligence that shapes the IAEA agenda—all actions that have been evident in the Iran crisis, for example. This perceived politicization is widely understood as objectionable by many NNWS and produces resistance to the reform agenda and sympathy for the targets of American and Western exertions in the context of the NPT regime—including a level of support for Iran that has exasperated Washington. As one longtime observer of the NPT system has commented, “The creeping politicization of the IAEA is provoking a backlash.”²⁷

From the vantage point of the NNWS, the NPT regime looks like an unfair arrangement in which most of the burdens are borne by one side. Again, Dhanapala captures the flavor of this perspective: “Inherent weaknesses in the NPT—such as the asymmetry of obligations between nuclear weapon states and non-nuclear weapon states—are a legitimate grievance of those within the

24. Professor Oliver Stuenkel, as quoted in Trita Parsi, *A Single Role of the Dice: Obama’s Diplomacy with Iran* (New Haven, Conn.: Yale University Press, 2012), 177.

25. Dhanapala, “Planning for the 2010 NPT Review Conference,” 5.

26. Daniel Joyner, “Iran’s Nuclear Program and the Legal Mandate of the IAEA,” *Jurist Forum*, November 9, 2011, <http://jurist.org/forum/2011/11/dan-joyner-iaea-report.php>.

27. Ramesh Thakur, “Whose Atomic Energy Agency Is It, Anyway?” *The Japan Times*, November 21, 2011.

treaty.”²⁸ Former Director General of the IAEA, Mohamed ElBaradei, offers a similar judgment in his book *The Age of Deception* (in a chapter tellingly entitled “Double Standards”): “The most fundamental problem with the nuclear nonproliferation regime is, in itself, a double standard: the inherent asymmetry, or inequality, between the nuclear haves and have-nots.”²⁹

Those states that already see themselves as victimized by a one-sided regime may not be enthusiastic about assuming additional restrictive obligations. And reform will hold less attraction for those that see the regime as an instrument in the hands of the United States and its friends and that believe the regime is employed to constrain and punish Washington’s rivals.

In sum, conceptions of the basic character and core bargain of the NPT regime differ significantly. It is almost as if there are two NPT regimes, as perceived on each side of the NPT divide. There are points of tangency in these competing perceptions, but to a considerable extent each side is living in its own NPT regime. The result is a high degree of mutual incomprehension and frustration, arising from the fact that each side has its own notion of what the NPT regime is and how it ought to work.

DIVERGING DIAGNOSES: CONSTRAINING TECHNOLOGY AND PUNISHING CHEATERS, OR UNFAIR APPLICATION AND UNEQUAL IMPLEMENTATION?

From these different conceptions of the NPT regime flow different diagnoses of the flaws and shortcomings of the regime. In the eyes of Western governments (notably, but not only, Washington) and nonproliferation specialists, the obvious and primary shortcoming of the NPT system is that it is not reliably or sufficiently effective at limiting the spread of sensitive nuclear technology and catching and punishing cheaters. These concerns dwarf all other considerations and overwhelmingly dominate the Western nonproliferation agenda. Restrictions on sensitive nuclear trade are too lax or are not well enforced. The system is not transparent enough to deter all cheaters or to reliably detect cheating. When cheaters are caught, the system is not effective at responding to non-compliance or at punishing transgressors. Therefore, export controls must be strengthened, transparency must be increased, and responses to cheating must be improved. In broad terms, these are the preoccupations that drive the Western reform agenda in the NPT context.

This set of concerns is not merely hypothetical or conceptual but is given life by the protracted and unsuccessful efforts to cope with the nuclear programs of North Korea and Iran. In the case of North Korea, it signed the NPT

28. Jayantha Dhanapala, “The State of the Regime,” in *Repairing the Regime*, ed. Cirincione, 16.

29. Mohamed ElBaradei, *The Age of Deception: Nuclear Diplomacy in Treacherous Times* (New York: Metropolitan Books, 2011), 236.

in 1985 but did not reach a safeguards agreement with the IAEA until 1992, years overdue. When the IAEA finally began to inspect North Korean nuclear facilities in June 1992, it soon found that Pyongyang's disclosures about its nuclear infrastructure were inaccurate, and the IAEA almost immediately suspected that North Korea was not being honest about its production of weapons-usable plutonium. Faced with non-cooperation from Pyongyang in addressing this issue, on April 1, 1993, the IAEA Board of Governors found North Korea to be in a state of noncompliance with its safeguards obligations and referred the case to the UN Security Council. At no time since has North Korea fully complied with its safeguards agreement despite various IAEA and UN resolutions intended to pressure it to do so.

In 1994, in the midst of a crisis so severe that it raised fears of war, North Korea reached a deal with the United States (known as the Agreed Framework) in which it agreed to an IAEA-monitored freeze of some core components of its nuclear program in return for an array of economic benefits, including energy and food assistance. This arrangement did not fully meet Pyongyang's safeguards obligations but did manage to contain Pyongyang's plutonium program for nearly a decade. The agreement, however, broke down in 2002, after the revelation that North Korea had been pursuing a secret and illicit uranium enrichment program. In the crisis that erupted anew, in late 2002, Pyongyang threw out the IAEA, withdrew from the NPT in January 2003, reopened its nuclear facilities, resumed its active pursuit of nuclear weapons, and in October 2006 conducted a nuclear weapons test. Here was a sequence of events that galvanized concern about the adequacy of the NPT regime: many years of noncompliance by a member state; ineffectual response by the IAEA, the UN, and the international community; withdrawal from the NPT; and open acquisition of nuclear weapons.

The Iran story is equally distressing to the Western nonproliferation community. In August 2002, it was revealed that Iran had been secretly developing nuclear facilities, including a uranium enrichment facility that inevitably raised weapons implications given its dual-use nature. Subsequent investigations by the IAEA found that Iran had engaged in a covert nuclear development program for nearly two decades and that it had committed numerous safeguards violations while doing so. Thus commenced a slow-motion crisis that has already consumed a decade without any sign of resolution.³⁰

Iran has insisted throughout that its program is peaceful and represents its exercise of nuclear rights conferred by Article IV of the NPT. The IAEA judges that Iran has not provided a satisfactory explanation of either its past nuclear behavior or the inconclusive but worrying pattern of evidence suggesting that Tehran is interested in acquiring nuclear weapons. In February 2006, the IAEA Board of Governors referred the Iran case to the UN Security Council. The en-

30. The origins and structure of this crisis are described in detail in Steven E. Miller, "Proliferation Gamesmanship: Iran and the Politics of Nuclear Confrontation," *Syracuse Law Review* 57 (3) (2007): 551-599.

suing years have witnessed a series of binding UN Security Council resolutions calling for Iran to suspend its enrichment program, accompanied by an escalating imposition of sanctions against Iran intended to pressure it to comply with the UN Security Council resolutions. Nevertheless, periodic efforts to find a negotiated solution to the confrontation have been fruitless.

Iran's nuclear program has continued to progress steadily, albeit slowly and fitfully. Iran today possesses exactly the nuclear capacity—that is, a functioning uranium enrichment plant—that the IAEA and the UN Security Council sought to prevent. This means that Iran has the technical capability to produce fissile material for nuclear weapons should it choose to do so. In the eyes of Washington, Jerusalem, and many others, this is an extremely negative and dangerous development (indeed, it is seen as intolerable by some) that may portend an array of adverse consequences for regional and international security.³¹ Here again is a picture that raises concerns about the effectiveness of the regime: broken rules, protracted defiance, ineffectual response, and failure to prevent the progress of Iran's nuclear program.

These lengthy demonstrations of the limits of the NPT regime lead many to the conclusion that reform is imperative; correcting the revealed shortcomings is essential to the future of the system. Therefore, the IAEA must be conferred with additional powers, the system must become more transparent, sensitive technologies must be more strictly controlled, and violators must face certain and punishing consequences.

Concern about North Korea and Iran is not limited to Western governments, of course; but for many non-aligned states, there are other sources of concern and discontent, other high-priority issues that animate their perceptions of needed reform in the NPT regime. For the nuclear have-nots, the fundamental problem with the regime is that the core bargain is not being respected, the three pillars are not treated equally, the rights of NNWS are being truncated or eliminated, the NWS do not fulfill their obligations, and in general the system is not implemented fairly. In principle, the NPT is a universal regime whose rules apply equally to all parties. In practice, there have been numerous deviations from the universalist norm. To a degree often not fully recognized in Western capitals—or at least not in Washington—the result is a common perception that the regime is unfair, that its rules are unequally applied, that its application and enforcement are politically motivated, and that a state's experience within the regime is heavily shaped by its relations with major powers (above all, the United States). A few examples suffice to illustrate the point.

31. There has been extensive discussion of the dangers of a nuclear-armed Iran. For a representative illustration of this voluminous literature, see Eric S. Adelman, Andrew F. Krepinevich, and Evan Braden Montgomery, "The Dangers of a Nuclear Iran: The Limits of Containment," *Foreign Affairs* 90 (1) (January/February 2011): 66–81.

The U.S.-India Deal

India has always been an outsider to (and at times a critic of) the NPT regime. It has not signed the NPT. It did not place its nuclear facilities under IAEA safeguards. It developed, tested, and deployed nuclear weapons. As a non-signatory of the NPT, India was within its rights to proceed as it did. It was not, however, entitled to enjoy the benefits of NPT membership, and it was subject to the Nuclear Suppliers Group (NSG) rules that forbid nuclear cooperation with states that have unsafeguarded facilities.

In pursuit of its own geostrategic interests, the United States in 2005 worked out a nuclear deal with New Delhi that in effect exempted India from the existing rules while allowing it to retain its nuclear weapons capability and to choose which of its nuclear installations would be subject to IAEA inspection. The deal is intended to permit “full resumption of civil nuclear energy cooperation.”³² With this deal, India escaped the constraints associated with its status as a non-signatory of the NPT in possession of nuclear weapons.

While many expected the U.S.-India nuclear deal to be controversial and potentially harmful to the NPT regime, the actual impact has been more damaging than anticipated. Indeed, India compounded the negative impact of the deal on the NPT system by underscoring that its nuclear weapons capability was not constrained and that it retained sole and full discretion to pick and choose which of its facilities it would expose to IAEA scrutiny. As many other parties see it, India has been given most of the advantages of NPT membership while accepting almost none of the obligations. This deal raised immediate issues of hypocrisy and double standards. Iran has been treated harshly and deprived of access to international nuclear markets though it is an original member of the NPT, though its nuclear facilities have been heavily inspected, though it allowed implementation of the Additional Protocol for several years, though it has never been (in the eyes of many observers) proven to have nuclear weapons or even a weapons program. How is it that India, outside the regime, uninspected, and unambiguously in possession of nuclear weapons, is treated better than Iran, inside the regime and heavily inspected? How is it that nuclear-armed non-member India gains access to benefits of membership that are meant for members in good standing?

Further, in pushing an NPT reform agenda, the United States and other Western powers are asking NPT members to accept additional obligations—even while conferring benefits on India despite its refusal to accept NPT limitations. Why should NPT member states take on further burdens or be penalized when India has been “rewarded” despite staying out of the system? The deal with India seemed like proof positive that the regime is unfair and

32. IAEA Information Circular, “Communication Dated 25 July 2008 Received from the Permanent Mission of India Concerning a Document Entitled ‘Implementation of the India-United States Joint Statement of July 18, 2005: India’s Separation Plan,’” INFCIRC/731, July 25, 2008, 7.

politicized. The message implied that, far from being universal, the rules do not apply when the interests of the United States are engaged. As George Perkovich notes in his extensive analysis of the deal, “Many observers and governments believe that the NSG-India nuclear deal is a bad portent: it may signal corrosion of the rules-based nuclear order.”³³ It is hard to believe that these ripple effects were taken into account when the U.S.-India deal was being consummated.

The NAM has responded to the deal by invoking traditional NPT strictures. In its 2010 working paper, it notes that states parties to the NPT have a commitment “not to accord any status or recognition” and to “prohibit completely” nuclear transfers to states that are not party to the NPT.³⁴ In an unusual inversion of roles, NAM is here appealing for full fidelity to the regime, with the United States seen as eager to ignore the rules. Though Washington hoped that the India deal would be a unique and benign exception that would fade rapidly from view, it has instead come to figure prominently in NPT diplomacy and was a pervasive and contentious issue at the 2010 NPT Review Conference.³⁵ Subjected to intense criticism of the India deal and to charges that the deal is inconsistent with principles agreed on at past review conferences, the United States responded by insisting that such measures are not legally binding and stated flatly that it has no intention of revising or abandoning the deal. As Potter and Mukhatzhanova observe, the U.S. position “was viewed by many NAM states and others as suggesting that states can pick and choose to implement whatever elements of NPT Rev Con decisions they care to while disavowing others that no longer strike their fancy—an approach that makes it very difficult to hold states to their NPT obligations.”³⁶

Many experts examining the U.S.-India deal believe that serious damage has been done to the NPT regime. “The U.S.-India nuclear pact virtually rewrote the rules of the global nuclear regime,” says Indian nonproliferation expert Harsh Pant. “The Pact creates a major exception to the U.S. prohibition of nuclear assistance to any country that does not accept international monitoring of all its nuclear facilities.”³⁷ The U.S.-India deal “blew a hole in international arrangements to stop proliferation,” writes another commentator.³⁸ Not surprisingly, a Pakistani analyst described the deal in even more heated terms as “the single most brazen infraction of the Nuclear Non-Proliferation Treaty to date.”³⁹ In short, a deal that was viewed in Washington as a geostrate-

33. George Perkovich, “Global Implications of the U.S.-India Deal,” *Daedalus* 139 (1) (Winter 2010): 20.

34. NAM Working Paper, 10.

35. On the India issue at the 2010 NPT Review Conference, see Potter and Mukhatzhanova, *Principles vs. Pragmatism*, chap. 3, pp. 19–22. My discussion here draws on their account.

36. *Ibid.*, 22.

37. Harsh Pant, “Power Game in Asia Trips Nuclear Nonproliferation,” *YaleGlobal Online*, August 12, 2010.

38. Michael Richardson, “A Losing Battle Against Proliferation,” *The Japan Times*, July 8, 2010.

39. Zafar Hilaly, “Obama’s Trip to India Full of Optics, Little Substance,” *Rupee News*, October 8, 2010.

gic coup has in the NPT context come to symbolize the unfairness and the politicization of the regime.

Israel and the Middle East Nuclear-Weapons-Free Zone

For a significant subset of the NPT membership—most notably for the twenty-two members of the Arab League and their supporters within the NAM—Israel’s long-presumed nuclear weapons capability constitutes another prominent source of frustration and disaffection. As with India, Israel has not signed the NPT, has not violated any international legal obligations, and is within its sovereign rights to possess nuclear weapons if it chooses to do so. Thus, putting Israel’s nuclear weapons capability on the international agenda is not a matter of responding to transgressions within the regime or dealing with a rule-breaker. Rather, it has to do with the widespread sense within the Middle East that while NPT member states that have refrained from pursuing or acquiring nuclear weapons are regularly and routinely pressed to accept additional obligations and to constrain future nuclear options, Israel is almost entirely exempt from pressure, scrutiny, or criticism. The pursuit of even peaceful nuclear technologies by other Middle Eastern states results in worries about proliferation risks, suspicion of their motives, and demands that they forsake “sensitive” nuclear technologies, while Israel’s nuclear weapons program is ignored or, even worse, justified. As ElBaradei has explained, “To the Arab Muslim world, the treatment of Israel’s nuclear program constituted a staggering double standard, explainable only as an arbitrary distinction between ‘good guys’ and ‘bad guys.’”⁴⁰

Responding to efforts to deflect attention from Israel, the Arab League complained in one submission to an NPT preparatory meeting in 2009, “We are surprised that some states try to provide the rationale and the excuses for Israel not to join the NPT under the pretext of Israel’s security.”⁴¹ From the perspective of the Arab League states, the major issue for the NPT is not finding ways to further constrain member states but figuring out how to achieve “universality” for the NPT regime—which in the Middle East means focusing on the one state in the region—Israel—that has refused to join the NPT and that is alone in possessing nuclear weapons.

Accordingly, calls for universality are a central component of the Arab League’s NPT-related diplomacy—a proposition reinforced in the official documents of the NPT review conferences. The 2010 action plan, for example, “reaffirms the urgency and importance of achieving universality of the Treaty.”⁴² Accompanying this broad advocacy of universality are regular exhortations that

40. ElBaradei, *The Age of Deception*, 224.

41. “Statement of the League of Arab States before the 3rd Preparatory Committee for the Review Conference of the Parties to the Treaty of the Non-Proliferation of Nuclear Weapons—2010,” New York, May 4–15, 2009, 2.

42. Draft Final Document, NPT/Conf.2010/L.2, 27.

Israel should join the NPT.⁴³ From the perspective of the Arab League, it is hard to understand why calls for the universality of the NPT or for Israel's accession to the NPT should meet with indifference, resistance, or criticism; for their part, Israel's supporters see these calls as unfortunate attempts to pressure Jerusalem on an intractable issue. Another sore point for the Arab League is that NPT members are subject to inspection whereas Israel's nuclear program remains both ambiguous and completely nontransparent. Accordingly, despite Israel's status outside the NPT regime, there are recurrent proposals that Israel's nuclear facilities should be subjected to international scrutiny in order to end its unique status as the only state in the region not subject to NPT-related transparency rules.⁴⁴ For example, the Organization of the Islamic Conference, which encompasses fifty-seven member states, has adopted this position.⁴⁵

The Arab League has a specific focus for its grievances with respect to Israel's singular nuclear status in the Middle East. At the 1995 NPT Review and Extension Conference (which was mandated by the treaty to consider whether the NPT should expire, be prolonged for a limited period, or extended indefinitely), the Arab states extracted a concession in return for their (in some cases reluctant) support for indefinite extension. The 1995 conference adopted what is known as the Middle East Resolution, which called for the achievement of universality in the Middle East "as soon as possible," urged that practical steps be taken to create a WMD-free zone in the Middle East, and pressed the NWS in particular "to exert their utmost efforts" to ensure the achievement of these objectives.⁴⁶ To the Arab League, and to the NAM more generally, the 1995 Middle East Resolution was an integral and crucial part of the bargain that led to the indefinite extension of the NPT. As the NAM insisted in its statement to the 2008 NPT preparatory committee meeting, "The 1995 resolution on the Middle East was an essential element of the outcome of the 1995 Review and Extension Conference and the basis on which the NPT was indefinitely extended."⁴⁷

The outcome of the 1995 Review Conference, however, created expectations that were subsequently dashed. Essentially nothing has been done in the intervening period to implement the Middle East Resolution. From the perspective of Washington and Jerusalem, there was little interest in pushing this

43. Examples abound: for instance, "Arab League Calls on Israel to Join NPT," PressTV, July 15, 2010, <http://previous.presstv.ir/pop/Print/?id+134958>; and Jill Parillo, "Arab League Speaks to NPT," Physicians for Social Responsibility, May 7, 2009, <http://www.psr.org/nuclear-weapons/blog/arab-league-speaks-to-npt>.

44. See, for example, "Arab States Demand Israeli Transparency," Global Security News, August 16, 2010, <http://www.globalresearch.ca/index.php?context=va&aid=20652>.

45. "IAEA Should Inspect Israeli Nukes: OIC," PressTV, October 21, 2010.

46. "Resolution on the Middle East," NPT/CONF.1995/32/RES/1, <http://www.fas.org/nuke/control/npt>.

47. "Statement on Behalf of the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons at the General Debate of the Second Session of the Preparatory Committee for the 2010 Review Conference of the States Parties to the Treaty on Non-Proliferation of Nuclear Weapons," Geneva, Switzerland, April 28, 2008, 4.

idea forward, and in Israel there was no acceptance of an obligation or commitment that emerged from a treaty regime it did not join and from a diplomatic process in which it did not take part. For the Arab League states, nevertheless, the protracted inaction with respect to the Middle East Resolution was a bitter disappointment involving a bargain betrayed, promises broken, and commitments unfulfilled. Egypt's Ambassador to the UN Conference on Disarmament, Hisham Badr, exemplifies this perspective, commenting publicly that "[w]e in the Middle East feel we have, short of a better word, been tricked into giving concessions for promises that never materialized." As Badr further explains, the disillusionment of Arab League states over the failure of the Middle East Resolution has had a predictable negative impact on Arab perceptions of the NPT: "There is widespread resentment in the region towards the NPT and what it seeks to achieve, its double standards and lack of will."⁴⁸

The endless paralysis associated with the Middle East Resolution has had two profound effects on the behavior of Arab League states within the NPT regime. First, the receptiveness of Arab states toward NPT reforms that will involve acceptance of further obligations or further constraints is directly linked to this issue. As the Arab League statement to the 2009 NPT preparatory committee meeting explained explicitly:

The objective of strengthening the NPT requires the realization of its universality *before attempting to pursue any additional commitments on the Parties*. It is also imperative to implement the resolutions of previous Review conferences . . . especially the Middle East resolution, which was an essential element of the bargain to indefinitely extend the NPT. The League of Arab States stresses that the inability to achieve the universality of the treaty and to implement the Middle East Resolution *will represent an insurmountable obstacle in front of many state parties to accept any additional commitments or new restrictions* on their rights.⁴⁹

Thus, the prospects for efforts to strengthen the NPT regime are seriously affected by the deep discontent felt by Arab League member states that believe they are subject to a double standard: recurrent efforts to tie their nuclear hands while Israel's nuclear weapons capability is met with benign acceptance.

Second, at NPT review conferences, the overwhelming concern of the Arab League and many of its member states is to gain reaffirmation of, and commitment to move forward on, the Middle East Resolution. This reality consequently plays a prominent role in the diplomacy associated with those conferences. At the 2010 NPT Review Conference, for example, this issue became one of the major points of contention, and it was made unmistakably clear that Arab states would not accept a final document—the holy grail of NPT review conferences—

48. Quoted in "Mideast Feels Tricked by Nuclear Arms Treaty," Agence France Presse, March 10, 2010.

49. "Statement of the League of Arab States before the 3rd Preparatory Committee for the Review Conference of the Parties to the Treaty of the Non-Proliferation of Nuclear Weapons—2010," 1–2; emphasis added.

unless their demands with respect to the Middle East Resolution were met. The result was persistent melodrama because the United States was reluctant to accept provisions that in effect singled out and would be awkward for Israel. This dispute lasted to the waning days of the conference.⁵⁰ The leverage exerted by Arab League states was considerable because inability to produce a final document would have been widely regarded as signifying a failed conference and as damaging to the health of the regime.

In the end, a compromise was found—largely because the Obama administration was determined that the 2010 conference be successful—and core Arab League concerns were satisfied. Indeed, the action plan of the 2010 final document contains an entire section devoted to the Middle East Resolution that mostly echoes the Arab League formulations on the issue. It stresses the importance of drawing Israel into the NPT, calls for the “full implementation” of the 1995 resolution, and proposes that the UN Secretary General convene a conference in 2012 to consider the establishment of a WMD-free zone in the Middle East. At least momentary success was achieved, and the 2010 NPT Review Conference managed to issue a consensus final document to considerable acclamation. However, trouble soon ensued, guaranteeing that this issue will continue to bedevil the NPT system. Israeli Prime Minister Benjamin Netanyahu promptly declared that Israel would not attend such a conference; subsequently, Israel has been more flexible, but its participation remains uncertain.⁵¹ The United States displayed a singular lack of enthusiasm for the entire enterprise. In the aftermath of the 2010 NPT Review Conference, very little was done to move forward the preparations for the 2012 conference. The Arab League found itself back in a familiar position: lamenting the lack of progress in following up on the 1995 Middle East Resolution and frustrated at what it sees as the disregard of its interests and preferences.

It is an inescapable reality of NPT diplomacy that a significant fraction of NPT member states is perennially dissatisfied by what they see as an unfair double standard applied in their region. Israel, for its part, is preoccupied with worries about its security and sees the nuclear issue as inextricably bound up with the so-far intractable conflict with its neighbors. The Israeli government has remained outside the NPT, has no binding legal obligations that might constrain its choices with respect to the possession of nuclear weapons, and has thus far shown no willingness to alter its nuclear position in anything like the current geopolitical circumstances. Prospects would be brighter if Israel were able to resolve its differences with its Palestinian and Arab League neighbors. Israel’s view of the WMD-free zone in the Middle East might be considerably more favorable if it were confident that its sovereignty is respected by all regional players and its borders are agreed and accepted by all relevant parties. A genuine and

50. For a brief overview of these events, see Peter Crail, “NPT Parties Agree on Middle East Meeting,” *Arms Control Today*, June 2010, esp. 2–3, <http://www.armscontrol.org/print/4263>.

51. Anne Penketh, “Unrest Complicates 2012 Middle East Meeting,” *Arms Control Today*, March 2011, http://www.armscontrol.org/act/2011_03/Middle_East_Meeting.

comprehensive peace settlement that ensures Israel's security could include the prospect of eventual Israeli membership in the NPT as a NNWS. However, such an outcome is not in view in the current harsh and unsettled environment in the Middle East. Hence, it is hard to see a happy resolution of the nuclear issue in the Middle East in any near- or medium-term time frame. Accordingly, this issue will linger on the NPT agenda, a chronic unhealed wound that undermines the prospects for reforming and strengthening the regime. Continued frustration and disaffection on the part of Arab League member states is to be expected. In time, the fundamental question may be whether this issue eventually causes some unraveling of the NPT regime. Though explicit threats to withdraw from the NPT are generally avoided in official Arab positions, they are sometimes voiced, and in any case this threat is a latent implication of the Arab perception.⁵² Reconsideration of the Arab commitment to the NPT may turn out to be unavoidable if the nuclear status quo in the Middle East persists indefinitely with no signs of movement or progress.

NATO's Extended Deterrence Doctrine

For most of the nuclear age, the United States has extended nuclear guarantees to most of its allies. It has promised to use nuclear weapons if necessary in defense of its security partners—most famously, in the context of NATO and Japan. Within these alliances, this nuclear arrangement is regarded as normal, accepted, and taken for granted as a feature of the international landscape. Indeed, Washington's nuclear protection commitments were already long in place when the NPT was signed, and in the negotiation of the NPT they were specifically excluded from the constraints created by the treaty. In Western eyes, the negotiating history of the treaty is clear about this. Washington and its allies see nothing wrong with or objectionable about the extension of a "nuclear umbrella" as a core element of the defense strategy of America's coalitions.

In the NPT context, however, Washington's nuclear guarantees to allies attract animated criticism. This is viewed as yet another way in which the major powers exempt themselves and their friends and allies from the strictures of the NPT even while pressing for the creation of an ever more restrictive nuclear environment for NNWS members of the NPT. Within NATO, for example, twenty-eight member states enjoy the security benefits provided by nuclear weapons—benefits that are denied all other NNWS members of the regime. A substantial subset of the membership of the NPT is thus regarded as *de facto* members of the nuclear club, relying on nuclear weapons and nuclear threats to undergird their security. Moreover, through NATO's nuclear consultative mechanisms, these states have a voice in NATO's nuclear policy even if they do not themselves directly possess nuclear weapons. This situation is viewed as unfair, discriminatory, and impossible to square with fundamental restrictions within

52. See, for example, "Arab League Vows to Drop Out of NPT if Israel Admits It Has Nuclear Weapons," *Haaretz*, March 5, 2008; and Elaine M. Grossman, "Egypt Plays Key Nonproliferation Role But Keeps its Nuclear Options Open," *Global Security Newswire*, June 10, 2010.

the NPT itself. In Article I of the NPT, the NWS pledge that they will not provide nuclear assistance of any sort “to any recipient whatsoever,” whether “directly or indirectly.” Similarly, in Article II, NNWS pledge not to receive any such assistance, including “control over such weapons . . . directly or indirectly.” To critics, the joint pursuit of a vigorous alliance-based nuclear deterrence doctrine is not compatible either with the broad purpose of the NPT (aimed at limiting nuclear weapons and promoting disarmament) or with the basic provisions of the treaty.

This issue, then, has become another grievance in the portfolio of dissatisfactions felt by some NNWS. The NAM, for example, has launched explicit criticism of Washington’s long-standing habit of extending nuclear guarantees. It opens its working paper to the 2010 NPT Review Conference with a discussion of “Nuclear Doctrine and Nuclear Sharing,” expressing “deep concern” over the “security doctrines of Nuclear Weapon States, including the ‘NATO Alliance Strategic Concept,’ which not only sets out rationales for the use and threat of use of nuclear weapons but also maintains *unjustifiable concepts* on international security based on promoting and developing military alliances and nuclear deterrence policies.” In a clear swipe at NATO, the NAM document urges states to “refrain from nuclear sharing with other states under any kind of security arrangements, including in the framework of military alliances.” And the NAM underscores that in its view this issue raises questions of treaty compliance, emphasizing “the particular importance attached to the strict observance of Articles I and II.”⁵³ Other critics make direct accusations of noncompliance based on their interpretation of the illegality of NATO’s nuclear doctrine. At the 2010 NPT Review Conference, to cite just one example, Iran urged that “it is imperative for NPT member states parties to take the cases of violation of Article II by the NATO members very seriously.”⁵⁴ Certainly, Washington and its close allies are not inclined to take seriously criticism from Iran, a state they regard as both irresponsible and in violation of its own obligations in the NPT regime; the NAM, in startling contrast, has chosen Iran to be its next leader, beginning in 2012.

NATO has always believed and insisted that its nuclear policies are compatible with the NPT and were taken into account when the NPT was negotiated. Both historically and legally, it has a case. The political reality, however, is that many parties view the U.S. policy of extended deterrence to be just another example of the one-sided and hypocritical character of the NPT regime: the major powers and their closest friends can benefit from nuclear weapons; others may not.

53. NAM Working Paper, 2–3; emphasis added.

54. Quoted in Rebecca Johnson, “NPT Prepcom 2008, General Debate Day 2: Of Common Endeavors and Double Standards,” The Acronym Institute, April 29, 2008, 5, <http://www.acronym.org.uk/npt/08pc02.htm>.

These several examples—the U.S.-India deal, the Middle East Resolution, and the NATO extended deterrence question—demonstrate vividly that the problems and grievances seen by the have-nots in the NPT regime are quite different from the roster of concerns that animate Western nonproliferation policy. Indeed, in some respects the viewpoints are wildly apart: the U.S.-India deal is seen as a diplomatic triumph in Washington but as a blatant breach of the rules by critics in the NPT system; NATO's extended deterrence policy is seen as natural and desirable in Washington but as hypocritical and unlawful by critics from the nuclear have-nots. And with their sense of the regime's flaws being so far apart, those on opposite sides of this fault line have highly divergent positions about how the regime should be reformed.

DIFFERING PERSPECTIVES ON REFORM

It is commonly believed in the Western nonproliferation community that decades of experience with the NPT regime have revealed its flaws, loopholes, and inadequacies.⁵⁵ Worries about the regime's adequacy to address present or future challenges have given rise to an agenda of reforms intended to strengthen the regime. In Western nonproliferation circles there is wide belief, if not near consensus, that reform is desirable and probably necessary to strengthen the regime and to contain future challenges to the regime. Many proponents of reform believe that the necessary steps are obvious, the arguments for taking these steps are powerful, and the needed international support should be forthcoming. Further, as Scott Sagan has argued in an important essay, the obligation to promote nuclear disarmament as specified in Article VI of the NPT applies to all member states, not just to NWS.⁵⁶ Because nuclear disarmament will not be feasible in a world marked by weapons proliferation, NNWS should see support for and participation in the strengthening of the NPT regime as part of their fulfillment of their own Article VI commitment; in this view, nuclear disarmament is a shared responsibility of both NWS and NNWS. Such reasoning, if accepted, would lead to wide international support for improving the NPT regime. In reality, however, nearly every significant proposed step meets with serious objection, and none has attracted the universal support required to be accepted fully and comprehensively as an agreed-upon element of the NPT system. The often paralyzing disagreements about the need and desirability of reform, and about what the elements of the reform agenda should be, are laid bare by the effort to press NPT-related reform.

55. See, as one clear example, Leonard Weiss's enumeration of fourteen flaws in the NPT in "The Nuclear Nonproliferation Treaty: Strengths and Gaps," in *Fighting Proliferation: New Concerns for the Nineties*, ed. Henry Sokolski (Maxwell, Ala.: Air University Press, 1996), 51–52.

56. Scott D. Sagan et al., *Shared Responsibilities for Nuclear Disarmament: A Global Debate* (Cambridge, Mass.: American Academy of Arts and Sciences, 2010).

Reinterpret Article IV to Restrict Fissile Material Production?

Article IV of the NPT confers on member states the “inalienable right” to participate in “the fullest possible exchange of equipment, materials, and scientific and technological information for the peaceful uses of nuclear energy.” This expansive language is widely taken to mean that member states are entitled, if they so choose, to acquire the full panoply of technology associated with civilian nuclear power, including those elements of the nuclear fuel cycle that have inherent weapons applications and implications. From the early days of the NPT regime, champions of nonproliferation were concerned that the permitted and legitimate spread of the nuclear fuel cycle was deeply problematic and had the potential to undermine the regime. This interpretation allowed, as Albert Wohlstetter’s famous 1976 article suggested, bomb-making capability to spread without any rules being broken.⁵⁷ In a subsequent essay from 1979, Wohlstetter complained about this perceived flaw in the NPT regime: “If an activity that brings a country very close to a nuclear weapon, and that stops just short of assembly, is legitimate, then by assumption there is nothing wrong with it. The government of that country has not violated the agreement.”⁵⁸

These long-standing worries have only intensified in the context of the nuclear crises of recent years and in view of the potential for large growth in nuclear power in the coming decades. Wohlstetter’s prescient comments from more than three decades ago are echoed in contemporary nonproliferation discussions. Russian expert Anatoly Dyakov voices the common refrain: “The fact that the nonproliferation regime has a loophole in the form of the right to develop the nuclear fuel cycle raises questions about whether the NPT meets nonproliferation objectives.” Dyakov has no doubt about the importance of the issue: “The biggest risk to the nonproliferation regime today comes from the spread of fissile material production capability.”⁵⁹

From this widely held and powerful diagnosis comes an obvious remedy: close the loophole. If the highest priority is to prevent the proliferation of nuclear weapons, then it seems sensible, if not imperative, to limit or forbid the spread of the uranium enrichment and plutonium reprocessing technologies that are necessary for the production of weapons-grade fissile material. Graham Allison has articulated the unassailable logic: no fissile material, no bomb.⁶⁰ Reflecting this logic, there has been growing interest in establishing the norm or adopting the rule that fissile material production technologies should not be acquired by or exported to any further states. Allison himself has described this

57. Wohlstetter, “Spreading the Bomb Without Quite Breaking the Rules.”

58. Albert Wohlstetter, Gregory Jones, and Roberta Wohlstetter, “Signals, Noise, and Article IV,” in *Nuclear Heuristics: Selected Writings of Albert and Roberta Wohlstetter*, ed. Robert Zarate and Henry Sokolski (Carlisle, Penn.: U.S. Army War College, 2009), 367. Interestingly, the quoted passage continues: “Moreover, it is the application of sanctions by the supplier that would be a violation of the agreement.”

59. Anatoly Dyakov, “Nuclear Fuel Cycle Security,” in *Nuclear Proliferation: New Technologies, Weapons, Treaties*, ed. Alexei Arbatov and Vladimir Dvorkin (Moscow: Carnegie Moscow Center, 2009), 39.

60. Allison, “How to Stop Nuclear Terror.”

as the principle of no new nascent nukes. Ashton Carter has similarly urged that “[t]o plug this loophole, the United States should champion a revision of the peaceful atom concept, encouraging nuclear power where it is needed but opposing any new nations from operating enrichment or reprocessing facilities.”⁶¹ This notion has become popular in nonproliferation circles and has inspired proposals and efforts intended to promote acceptance of the idea that states that do not now possess these “sensitive” technologies should not be permitted to obtain them.

President George W. Bush launched perhaps the most prominent such initiative in a speech at the National Defense University in February 2004. Referring to the problem that civilian nuclear programs can be a route to the acquisition of nuclear weapons if uranium enrichment or reprocessing is acquired, Bush stated explicitly, “I propose a way to close the loophole.” Bush’s solution was rooted in a core premise: “Enrichment and reprocessing are not necessary for nations seeking to harness nuclear energy for peaceful purposes.” And his proposal was direct and unambiguous: “The 40 nations of the NSG should refuse to sell enrichment and reprocessing equipment to any state that does not already possess full-scale, functioning enrichment and reprocessing plants.” Bush was also clear about the benefit of this bold proposal: “This step will prevent new states from developing the means to produce fissile material for nuclear bombs.”⁶² At least within the nonproliferation community, this idea became a staple in discussions about reforming and strengthening the NPT regime, and by 2009 a variant of Bush’s proposal had found its way into UN Security Council Resolution 1887. Passed in connection with a UN summit in New York that brought together heads of state to address the international nuclear policy agenda, UNSCR 1887 (paragraph 13) urges states “to adopt stricter national controls for the export of sensitive goods and technologies of the nuclear fuel cycle.”⁶³

Advocates of forbidding the spread of fissile material production capabilities recognize that recipient states have a right under the NPT to enjoy the benefits of nuclear power. However, the “inalienable right” to peaceful nuclear technology, they argue, does not necessarily imply assured access to the entire nuclear fuel cycle.⁶⁴ Moreover, it is possible to utilize nuclear power without pursuing en-

61. Ashton B. Carter, “How to Counter WMD,” *Foreign Affairs* 83 (5) (September/October 2004): 80.

62. “Remarks by President George W. Bush on Weapons of Mass Destruction Proliferation,” Fort Leslie J. McNair, National Defense University, February 11, 2004.

63. United Nations Security Council, “Resolution 1887 (2009),” S/RES/1887(2009), September 24, 2009, 4, para. 13.

64. Concern about Article IV and associated export control issues has given rise to elaborate legal discussions of what rights are actually conferred by Article IV and how the NPT can be properly interpreted. For a good example, see Ford, “Nuclear Technology Rights and Wrongs,” 237–283, which argues in great detail that Article IV does not provide or imply a right to purchase the entire fuel cycle. Another detailed analysis of this question, also arguing that Article IV does not confer an automatic right to the full fuel cycle, is Robert Zarate, “The NPT, IAEA Safeguards and Peaceful Nuclear Energy: An ‘Inalienable Right,’ But Precisely to What?” in *Falling Behind: International Scrutiny of the Peaceful Atom*, ed. Henry Sokolski (Carlisle, Penn.: U.S. Army Strategic Studies Institute, 2008), 221–290.

richment or reprocessing; this requires simply that nuclear fuel be purchased on the international market rather than being produced domestically.⁶⁵

This family of ideas has proven to be controversial and divisive. Some recipient states may be willing to pledge to forsake fissile material production as a condition of nuclear cooperation with major supplier countries. Abu Dhabi, for example, made such a promise when negotiating its nuclear cooperation deal with the United States (giving rise to the hope that there might be an “Abu Dhabi model” that would be widely acceptable among recipient states). More commonly, however, this approach meets with skepticism, resistance, rejection, and even anger that the terms of the NPT bargain are being challenged or modified in such a major way. Thus, President Bush’s initiative to prevent any spread of enrichment or reprocessing to any additional countries was opposed widely and rejected even by members of the NSG. As one former U.S. official explained, “Non-nuclear weapon states and developing nations saw the U.S. proposals as blatant efforts to divide the nuclear world into two separate but unequal parts, as a repudiation of the basic bargain of the NPT, and as a tactic to widen the divide between the nuclear haves and have-nots.”⁶⁶

Moreover, those who view themselves (sometimes with reason) as victims of the restricted international nuclear marketplace are particularly dubious about the advisability of forfeiting national fissile material production capabilities and relying instead on international fuel arrangements or assurances. As Iranian nuclear negotiator Naseri commented in 2005, “The moves towards restrictions on nuclear fuel production under the pretext of non-proliferation are bound to make the developing countries dependent on an exclusive cartel of nuclear fuel suppliers—a cartel that has a manifest record of denials and restrictions for political and commercial reasons.”⁶⁷ It is not surprising that Iran would feel this way considering that it has been largely (though not entirely) cut off from the legitimate nuclear marketplace over a period of several decades.

However, the rejection of this idea is widespread and fundamental, deriving from a sense of rights potentially abridged and bargains violated. (Indeed, ElBaradei has noted that Iran’s stance resonates for this very reason: “With Iran being one of the few Muslim countries that stood up to the West during this period, it increasingly was viewed by Muslims of many nationalities as the sole defender of their trampled rights.”⁶⁸) The reaction of the NAM is illustrative, particularly insofar as it represents a majority of NPT members. In the working paper it submitted to the 2010 NPT Review Conference, the NAM declared it-

65. This issue is explored in detail in a companion paper: Stephen M. Goldberg, Robert Rosner, and James P. Malone, *The Back-End of the Nuclear Fuel Cycle: An Innovative Storage Concept* (Cambridge, Mass.: American Academy of Arts and Sciences, 2012).

66. Fred McGoldrick, “The U.S.-UAE Peaceful Nuclear Cooperation Agreement: A Gold Standard or Fool’s Gold?” CSIS Policy Perspectives, Center for Strategic and International Studies, November 30, 2010, 2.

67. Naseri, “Iran’s Fuel Cycle Technology Only for Civilian Nuclear Programs,” August 10, 2005.

68. ElBaradei, *The Age of Deception*, 213.

self to be comprehensively against limits on nuclear technology transfer: “States parties to the Treaty are called upon to refrain from imposing *any restriction or limitation* on the transfer of nuclear equipment, material and technology to States Parties with comprehensive safeguards agreements.” In a clear if indirect criticism of efforts to penalize and coerce Iran for its pursuit of enrichment technology, the NAM argued that states should be free to choose their nuclear technology path without fear of retribution; it reaffirmed “that each country’s choices and decision in the field of peaceful uses of nuclear energy should be respected without jeopardizing its policies or international cooperation agreements and arrangements for peaceful uses of nuclear energy and its fuel cycle policies.” And on the specific question of limits on the nuclear fuel cycle, the NAM could not have been more emphatic: the NAM states “reject, in principle, any attempts aimed at discouraging certain peaceful nuclear activities on the grounds of their alleged ‘sensitivity’; and emphasize that any ideas or proposals pertaining to the nonproliferation of any peaceful technology, which are used as a pretext to prevent the transfer of such technology, are inconsistent with the objectives of the NPT.”⁶⁹

Tighten Export Controls?

The Article IV controversy is closely linked to the issue of export controls. Whether recipients like it or not, nuclear suppliers have established rules and can adopt stricter rules that limit the commercial transfer of sensitive nuclear technologies. Disagreement over export controls reflects a basic tension in the NPT regime between promoting and facilitating the use of civilian nuclear power, on the one hand, and limiting the spread of sensitive, weapons-related nuclear technologies, on the other. Coordinated export control arrangements are manifest in intergovernmental organizations, such as the NSG, as well as in national or multilateral sanctions, which are aimed at depriving particular states of access to certain technologies or to the nuclear market more generally. These restrictions are unwelcome and, indeed, sometimes viewed as illegal by recipient countries.

The NSG did not exist and was not envisioned at the time that the NPT was negotiated and the NNWS were given their (Article IV) guarantees of access to nuclear technology. Now comprising forty-six members, including all major suppliers, the NSG’s explicit purpose is restricting the supply of nuclear technology (particularly “sensitive” nuclear technology) to states that do not meet agreed criteria. The NSG fashions lists of restricted items and establishes standards that must be met by potential recipients if they are to be acceptable partners in nuclear commerce. The goal is to harmonize the export controls of the suppliers and thereby limit the spread of weapons-related technologies. Though it is an informal and voluntary association whose strictures are not legally binding, the NSG

69. NAM Working Paper; emphasis added.

has been fairly effective in influencing the pattern of nuclear trade. Within the Western nonproliferation community, the NSG is regarded as a positive feature of the regime, to be strengthened and updated to the extent possible.⁷⁰

Many NNWS, however, regard the export controls as problematic and the NSG as an unwelcome cartel that denies them access to nuclear technology despite their Article IV rights under the NPT. The 2010 working paper of the NAM, for example, complains explicitly about what it terms “undue restrictions on exports to developing countries.”⁷¹ Regarding the NSG and associated groups, Egyptian diplomat and nonproliferation specialist Mohamed Shaker has commented:

Who would have expected the rise of five major informal export control regimes governing, inter alia, nuclear trade? These regimes place obstacles before non-nuclear-weapon states that could be interpreted as constituting a serious departure from the inalienable right enshrined in Article IV. This is another real challenge that must be met, particularly now with the renewed interest in nuclear power worldwide. Adopting multilateral approaches for the assurances of supply of fuel and/or enriched uranium (such as an international fuel bank) will not be sufficient to answer the concerns of non-nuclear-weapon states. A dialogue is badly needed between suppliers and users for a fair interpretation of Article IV, and users must be involved in decisions affecting their economic development.⁷²

Interest in strengthening the NSG has existed since its founding some four decades ago, and complaints about the discriminatory nature of NSG restrictions and their incompatibility with Article IV have been around about as long. This perennial conflict is unavoidable because, as Harald Müller pointed out long ago, efforts to constrain the flow of dual-use technologies reflect a more restrictive interpretation of Article IV.⁷³ Indeed, as one expert assessment has concluded, many NNWS believe that the NSG “is engaged in a willful and systematic violation of Article IV.”⁷⁴ Here again, contrary instincts emerge: Western nonproliferators want to strengthen and update NSG constraints on nuclear trade whereas the NAM wants to relax “undue restrictions” on nuclear exports.

70. See, for example, Matthew Bunn and Martin B. Malin, “Enabling a Nuclear Revival—And Managing Its Risks,” *Innovations*, Fall 2009, 186–187. For a thorough overview of efforts to strengthen the NSG, see Ian Anthony, Christer Ahlstrom, and Vitaly Fedchenko, *Reforming Nuclear Export Controls: The Future of the Nuclear Suppliers Group*, SIPRI Research Report No. 22 (Stockholm: Stockholm International Peace Research Institute, 2007).

71. NAM Working Paper, 7.

72. Mohamed I. Shaker, “Meeting the Challenges of the 2010 NPT Review Conference,” *Disarmament Times*, March 31, 2010, <http://disarm.igc.org>.

73. See Harald Müller, “Reforming the System of Nuclear Export Controls,” in *Nuclear Export Controls and Supply Side Constraints: Options for Reform*, by Harald Müller and Lewis Dunn, PPNN Study No. 4 (Southampton, U.K.: Programme for Promoting Nuclear Nonproliferation, Mountbatten Center for International Studies, University of Southampton, October 1993), 7.

74. Weiss, “The Nuclear Nonproliferation Treaty,” 44.

While the NSG seeks to coordinate common rules among nuclear suppliers, export controls are exercised at the national level, typically in bilateral arrangements or deals. Here, too, there is considerable potential for friction. There is acrimony when states are hostile to one another and prohibitions against nuclear technology transfer are intended to deny market access as much as possible and are strictly enforced—as between Iran and the United States. Little wonder that Iran complains about its treatment. But efforts to restrict flows of nuclear technology or constrain nuclear technology options have caused surprisingly tense interactions among friends and allies. The United States and South Korea, for example, are in the midst of renegotiating their nuclear cooperation agreement, in anticipation of the existing agreement’s expiration. Major contention has arisen over South Korea’s interest in pursuing plutonium reprocessing and fast breeder reactors and Washington’s refusal so far to accept South Korea’s pursuit of that path (which is prohibited in the current agreement). There appears to be real anger in Seoul at Washington’s refusal to “fix” what South Korea regards as a problem with the current agreement, and the issue has produced remarkable outbursts of bitterness. “The conventional wisdom in Korea,” writes journalist Lee Byong Chul, “is that the United States can no longer act like a so-called ‘Nuclear Gestapo’ that attempts to define and dictate what is acceptable and what is not.” South Korea, he complains, has been “relegated to second class status.”⁷⁵ Thus, even in the context of a close alliance, the effort by a nuclear supplier to circumscribe the options and veto the preferences of a recipient produces toxic political consequences that reinforce divisions within the NPT regime.

In sum, to prevent the spread of weapons-related nuclear technology, key supplier states and many nonproliferation experts advocate a more robust export control regime, with tighter rules, updated lists of restricted items, and better implementation and enforcement. This instinct is regarded as all the more important as interest in nuclear power has spread around the globe. In this view, it is imperative to strengthen the export control regime to cope with a more nuclearized international order; it is necessary if the world is to benefit from greater utilization of nuclear power while avoiding the potential proliferation risks. From the perspective of many recipients and other have-not states, restrictive multilateral and unilateral nuclear export controls are undesirable and unwelcome. They are widely regarded as conflicting with basic rights conferred on NNWS and as a betrayal of one of the core bargains of the NPT. Even states that have no interest in the nuclear fuel cycle are reluctant to acquiesce in the abridgment of their presumed right to acquire it if they choose to do so. As many recipient critics see it, export controls represent noncompliance by the supplier states and provide a vivid example of the major powers’ hypocrisy in using the NPT regime to constrain nuclear have-nots while breaking the promises that

75. Lee Byong Chul, “Renegotiating the South Korea-U.S. Nuclear Pact,” *Asia Sentinel*, January 11, 2010.

brought have-not states into the regime in the first place. The basic contradiction between these opposing views seems sure to remain a vexing issue on the NPT agenda so long as any recipient states have any interest in pursuing the full fuel cycle.

Close the Article X “Loophole”?

Under Article X of the NPT, states have a legal right to withdraw from the treaty. Though some legal scholars argue that this right is not completely unconstrained, Article X is generally regarded as unconditional because the option to withdraw is entirely at the discretion of member states and requires only notification three months in advance.⁷⁶ This notification is required to include a statement explaining why the state believes its interests are so jeopardized that it must withdraw from the treaty, but otherwise nothing is demanded of the withdrawing state. No organization or international body must give assent; no adjudicating authority must accept the justification for withdrawal.

There has been growing concern—particularly since the withdrawal of North Korea from the NPT in 2003 and its subsequent acquisition of nuclear weapons—that Article X could be misused for purposes contrary to the NPT. Two scenarios stand out as especially worrisome. First, states could withdraw from the treaty and then develop nuclear weapons by utilizing the nuclear technology accumulated while a member in good standing of the regime. Second, states that are found to have committed violations of their safeguards obligations could respond by withdrawing from the treaty—as North Korea did. In these scenarios, Article X becomes, in effect, a route to nuclear proliferation that can be exploited by states seeking nuclear weapons.

Responses to these concerns have caused Article X to become another source of contention within the NPT regime. On the one side are those who believe, as Pierre Goldschmidt has written, that the regime is damaged or undermined by “the belief that a state can legally withdraw from the NPT without consequences.”⁷⁷ From this perspective, it is highly desirable to reinterpret Article X to be more restrictive or more conditional. The most dramatic suggestion has been offered by the prominent International Commission on Nuclear Non-proliferation and Disarmament. It argued in its 2009 report that withdrawal should “no longer be regarded as an available option” given the near-universality of the NPT and the growing international concern over nuclear weapons.⁷⁸ This bold idea amounts to a negation of Article X, and it would no

76. For the argument that there are limits on the right of withdrawal, see, in particular, George Bunn and John Rhinelander, “The Right to Withdraw from the NPT: Article X is Not Unconditional,” *Disarmament Diplomacy*, April/May 2005. They argue that the UN Security Council has a responsibility to respond to withdrawals and has the right to intervene if it judges the withdrawal to be a threat to international peace and security.

77. Pierre Goldschmidt, “The Urgent Need to Strengthen the Nuclear Non-Proliferation Regime,” Policy Outlook No. 25, Carnegie Endowment for International Peace, January 2006, 5, <http://carnegieendowment.org/files/PO25.Goldschmidt.FINAL2.pdf>.

78. *Eliminating Nuclear Threats*, 88.

doubt be highly controversial if it were pushed more centrally onto the international agenda. Hence, the United States, which otherwise is an energetic advocate of strengthening the constraints and conditions associated with Article X, has sought to distance itself from this suggestion.⁷⁹

Several other ideas about how the Article X withdrawal option might be refined have been more widely pushed by advocates of strengthening the regime.⁸⁰ First, there is the proposition that withdrawal should not be an acceptable remedy for cheating. States that have been found in noncompliance with their obligations under the NPT and associated safeguards agreements should remain accountable for their transgressions even if they withdraw from the treaty. Second, it has been proposed that safeguards agreements should not terminate when a state withdraws from the NPT. According to this logic, nuclear technology accumulated while within the regime should properly remain under international monitoring to assure that it is not used for weapons purposes—“safeguards in perpetuity,” as Goldschmidt describes it. Third, it has been suggested that states that withdraw from the NPT should not be allowed to keep the nuclear technology they were able to acquire because they were members of the regime. Many urge that suppliers insist on “take back” agreements with customers to establish that nuclear technology exports (at a minimum, any dual-use items) will be returned to the supplier in the event of a withdrawal. Finally, the UN Security Council could discourage withdrawal by making it known in advance that it would regard withdrawal as a threat to international peace and security, and thereby subject to punitive action. Some have urged the UN Security Council to make clear its intention to address NPT withdrawals should they occur.

Such ideas find wide favor in the Western nonproliferation community and pursuing such norms has been a high priority for a number of states, including the United States.⁸¹ Some progress has been made in promoting acceptance of these ideas. In UNSCR 1887, aimed at promoting global nuclear security, paragraphs 17 and 18 echo the Article X reform agenda. UNSCR 1887 calls for the Security Council to address NPT withdrawals “without delay,” insists that non-compliant states will remain responsible for violations of the treaty even if they withdraw, and encourages supplier states to establish the condition that they have the right to take back nuclear technology in the event of noncompliance or withdrawal by the recipient state.⁸² UNSCR 1887 is not a legally binding instrument,

79. See, for example, “Taking Stock of the NPT: An Interview with U.S. Special Representative Susan Burk,” *Arms Control Today*, March 2010, http://www.armscontrol.org/act/2010_03/Burk.

80. Some of these ideas are usefully covered in Pierre Goldschmidt, “Strengthening the NPT Regime,” paper presented at the 7th ROK-UN Joint Conference on Disarmament and Non-proliferation Issues, November 24–26, 2008, <http://www.carnegieendowment.org>.

81. On U.S. hopes for progress in strengthening Article X, see David Albright and Andrea Stricker, “After the 2010 NPT Review Conference: Advancing the Non-Proliferation Pillar,” Institute for Science and International Security Report, July 15, 2010, 4, http://isis-online.org/uploads/isis-reports/documents/Advancing_npt_15July2010.pdf.

82. United Nations Security Council Resolution 1887, 4–5.

and the UN Security Council is not wholly representative of the international community at large or the 189 members of the NPT. Still, it is an indication that efforts to reinterpret or attach conditions to Article X are far from universally objectionable. Indeed, the president's report issued at the end of the 2010 NPT Review Conference says that "numerous states" support these ideas.⁸³

Yet in many quarters the idea of reinterpreting Article X to make it more restrictive provokes strong criticism and resistance. On occasion, as at the Abu Dhabi conference organized by the American Academy of Arts and Sciences in December 2009, discussion of modifying Article X evokes harsh reactions, and the proposal is denounced as an unfortunate initiative that is sure to be polarizing and that will undermine other elements of the NPT reform agenda.⁸⁴ Respected voices in the international nonproliferation community have urged caution in raising the Article X issue. Mohamed Shaker, for example, has written that "the withdrawal clause (Article X) offers a needed safety valve and should not be tampered with. The Security Council should be in a position to differentiate between genuine and false reasons for withdrawing, especially in post-non-compliance situations, and act accordingly. No penalties should be imposed on a state found by the Security Council to be withdrawing for legitimate and convincing reasons."⁸⁵ Former UN Under-Secretary-General for Disarmament Affairs, Jayantha Dhanapala, warns that making Article X more restrictive "may seem like imprisoning states parties, cutting at the root of the sovereign right of states to join and leave treaties in accordance with their perception of national security. It will cause deep resentment especially among the NAM."⁸⁶ Such comments reflect the perception that states do not want to feel trapped in the NPT, and therefore they object to the notion that major states—whose own performance within the regime is questioned—should make it more difficult for other states to leave the regime if they so wish. (The proposed restrictions, it is noted, are not relevant to NWS, whose nuclear-armed status is recognized by the treaty.) Further, some states feel—as indicated by the position of the Arab League with respect to the Middle East WMD-free zone—that the threat of withdrawal may be necessary in order to advance their interests within the NPT regime; they see ample evidence that in normal circumstances their interests and preferences are ignored or rejected by major players in the regime.

The Article X issue was raised at the 2010 NPT Review Conference, but discussions were inconclusive, reflecting the clash of views. Review Conference President Libran Cabactulan's report commented neutrally that "[t]here were divergent views regarding [Article X's] interpretation with respect to other relevant international law."⁸⁷ Not surprisingly, therefore, the final document ap-

83. Draft Final Document.

84. See the conference report, *Nuclear Energy in the Middle East: Implications, Challenges, Opportunities* (Cambridge, Mass.: American Academy of Arts and Sciences, December 2009).

85. Shaker, "Meeting the Challenges of the 2010 NPT Review Conference."

86. Dhanapala, "Planning for the 2010 NPT Review Conference," 26.

87. Draft Final Document, 15.

proved by the states parties to the NPT makes no mention of Article X in its enumeration of an action plan.

Requiring the Additional Protocol?

In the aftermath of the 1991 war against Iraq, it was discovered that Saddam Hussein's regime had made considerable undetected progress on an illicit nuclear weapons program, though it had been subjected to regular IAEA safeguards inspections. This shocking revelation highlighted the limits of the existing safeguards system and provoked an effort within the IAEA to promote more effective measures to improve the IAEA's ability to detect covert activities related to the development of nuclear weapons. What emerged from this exercise was a model document known as the Additional Protocol, which was approved by the IAEA Board of Governors in May 1997. A supplement to traditional safeguards agreements and available for adoption by all NPT member states, the Additional Protocol increases the transparency of the NPT regime by expanding the IAEA's access to both information and facilities.⁸⁸

The Additional Protocol requires that states provide information about their nuclear activities more comprehensively and more promptly, significantly enlarging the volume and scope of information that must be provided to the IAEA. It empowers the IAEA to visit and inspect a wider range of facilities, including not only declared nuclear facilities (already covered by the traditional safeguards system) but also undeclared facilities as specified by the IAEA. The Additional Protocol further permits the IAEA to employ more intrusive methods, such as short-notice inspections and environmental sampling, that strengthen the IAEA's ability to discover hidden weapons-related nuclear activities. Altogether, the Additional Protocol is widely regarded as a significant augmentation of the safeguards system, a serious confidence-building measure, and (to many) an integral and necessary element of an adequate verification framework for the NPT regime.

Accordingly, calls for states to sign, ratify, and allow the application of the Additional Protocol are ubiquitous in discussions of the NPT reform agenda. The International Commission on Nuclear Non-proliferation and Disarmament, for example, urges the "universal take-up" of the Additional Protocol, suggests that it has become the "contemporary standard for NPT safeguards," and recommends that supplier states make acceptance of it a condition for the provision of nuclear exports.⁸⁹ UNSCR 1887 does likewise, describing it as one of "the essential elements of the IAEA safeguards system."⁹⁰ Both the president's report and the action plan of the 2010 NPT Review Conference encourage all states to accept and implement the Additional Protocol. Further, there are calls to make acceptance of the Additional Protocol a condition for the supply of nuclear tech-

88. A useful, concise overview is "The 1997 IAEA Additional Protocol at a Glance," Arms Control Association, October 2010, <http://www.armscontrol.org>.

89. *Eliminating Nuclear Threats*, 84.

90. United Nations Security Council Resolution 1887, 4.

nology to NNWS; this would be, as the Stockholm International Peace Research Institute study of the NSG puts it, “a logical and useful development.”⁹¹

Greater transparency for the sake of a stronger and more reassuring NPT regime is a notion that commands support. Moreover, significant headway has been made in getting states to accept the Additional Protocol. By December 2011, it was in force in 115 NPT member states, and a further 24 have signed but not yet ratified the document. The Additional Protocol has been judged, if not desirable, at least acceptable by a large majority of NPT members.

Even in this context, however, there are tensions and frictions. Universal acceptance is far from having been achieved. More than a dozen years after the approval of the Additional Protocol, more than fifty states have refrained from adopting it. Among those recalcitrant states are six with significant nuclear activities and a seventh (Iran) that has signed the Additional Protocol but now will not allow its implementation. In short, a considerable and important minority is not yet on board with the idea that the Additional Protocol should be universal.

Moreover, there is considerable resistance to the idea that the Additional Protocol should be regarded as mandatory or that states should be penalized or shunned if they choose not to sign it. There is much criticism, for example, of the idea that adherence to the Additional Protocol should be made a condition of nuclear supply. That step is seen as a backdoor way of making the Additional Protocol compulsory, denying states their right to choose and punishing those that do not make the choice preferred by nuclear suppliers (by denying them access to the nuclear marketplace). Even states that have signed the Additional Protocol have been willing to endorse criticisms of the idea that it should be required of all states that wish to buy technology in the international nuclear marketplace. Again, the NAM exemplifies this point. Though many NAM members have accepted the Additional Protocol, the NAM insists that it is voluntary in nature: “It is fundamental to make a distinction between legal obligations and voluntary confidence-building measures in order to ensure that such voluntary undertakings are not turned into legal safeguards obligations.”⁹² Not surprisingly given such views, this point is echoed in the documents that issued from the 2010 NPT Review Conference, which acknowledge that “it is the sovereign decision of any State to conclude an Additional Protocol.”⁹³

Thus, despite the wide acceptance of and the considerable enthusiasm for the Additional Protocol, dissent remains within the NPT system, and efforts to push for the Additional Protocol to be established as a global minimum standard have met with resistance. As Albright and Stricker write of the 2010 NPT Review Conference, “[T]he conference was unsuccessful in significantly advancing support for universal application of the Model Additional Protocol.”⁹⁴

91. Anthony et al., *Reforming Nuclear Export Controls*, 119. See also *Nuclear Programmes in the Middle East: In the Shadow of Iran* (London: International Institute for Strategic Studies, 2008), 152–153.

92. NAM Working Paper, 6.

93. Draft Final Document, 4.

94. Albright and Stricker, “After the NPT Review Conference,” 1.

Reform without Consent? The NSG Forges Ahead

Each of these elements of the NPT reform agenda—limiting flows of sensitive nuclear technology, tightening export controls, reinterpreting the withdrawal clause, and making the Additional Protocol mandatory—to one degree or another meets with contention and resistance. Efforts to push this agenda forward at NPT review conferences have not been successful in achieving universal consent and formal acceptance by all NPT member states; indeed, as described above, attempts to put this agenda before the system as a whole have tended to highlight divisions and disagreements rather than produce full consensus in support of desired reforms. At the 2010 NPT Review Conference, for example, the emphasis of the NAM was on “beating back” reform proposals.⁹⁵ In the absence of comprehensive acceptance of these measures by all NPT member states, the NSG has adopted an alternative strategy: it is gradually incorporating these measures into its own guidelines, establishing increasingly demanding rules for the system despite opposition by some or even many NPT member states.

A significant step in this direction was taken at the NSG plenary meeting in Noordwijk, The Netherlands, in June 2011. At this meeting the NSG members agreed, after years of deliberation, to strengthen substantially the guidelines governing the transfer of nuclear fuel cycle facilities.⁹⁶ The NSG established the Additional Protocol as a condition of supply, thereby making it mandatory for any state wishing to purchase dual-use items on the international market; this is precisely the outcome that the NAM has opposed. The new NSG rules also call for acceptance of permanent safeguards on sensitive nuclear technology even in the event of withdrawal from the NPT, thereby putting in place one of the controversial conditions associated with proposals to modify interpretation of Article X. The NSG has added additional restrictions on the transfer of enrichment and reprocessing technologies, including establishing the principle of “subjective criteria,” which allows supplier states to take into account “any relevant factors” when deciding whether to provide such technologies—this despite the sensitivities of many recipient states to any infringement on their rights and despite their opposition to more constraining export controls. The NSG, via its own deliberations, is thus putting in place measures that have not gained universal buy-in at NPT review conferences. By this route, it is compelling acceptance of important elements of the reform agenda.

From a broad nonproliferation perspective and in the eyes of those worried about strengthening the regime, these are welcome and even “overdue” developments. They push the regime in the direction of greater transparency and a more restrictive approach to the transfer of sensitive technology. They attract wide support among the Western arms control and nonproliferation community; the U.S. Arms Control Association, for example, has applauded these latest

95. Potter and Mukhatzhanova, *Principles vs. Pragmatism*, chap. 3, p. 14.

96. For an overview of this development, see Daniel Horner, “NSG Revises Rules on Sensitive Exports,” *Arms Control Today*, July/August 2011, <http://www.armscontrol.org/print/4961>.

moves of the NSG.⁹⁷ From the perspective of recipient states, however, the latest NSG moves represent just the sort of peremptory behavior that creates a sense of grievance: once again, the rules are being changed without their participation or agreement—or, worse, in the face of their opposition; once again, additional obligations and burdens are being imposed on NNWS, and voluntary options are transformed into mandatory requirements; once again, their perceived rights are affronted and their options are truncated or circumscribed; once again, the core bargain of the NPT (in which NNWS are promised “the fullest possible exchange” of nuclear technology) is being ignored or transgressed. Thus, strengthening the regime via coordinated action by the supplier cartel produces improved regulations, but it comes at the price of disharmony that can complicate the diplomatic management of the system. Many on the have-not side of the divide believe that this is not how the NPT regime should be reformed and that these reforms do not reflect their priorities.

An Alternative Reform Agenda

The NNWS have their own reform agenda, one that flows from their very different diagnosis of the flaws in the NPT regime. As we have seen, Western non-proliferators and the governments that share their views have pressed for greater transparency, much tighter and better enforced restrictions on international flows of sensitive technology, more constraints on the ability of states to withdraw from the NPT, and much tougher punishment for states in noncompliance—only to find that these ideas do not meet with wide or easy acceptance in the broad NPT membership. Meanwhile, many in the NAM and among the nuclear have-nots support a much different agenda. They commonly regard existing safeguards as sufficient and have little interest in restricting technology flows or making it harder to leave the NPT. They see a different set of shortcomings in the NPT that they would like to see addressed. At the broadest level, they seek a restoration of the original NPT bargain as they understand it. Rejecting the primacy of nonproliferation as the driver of the NPT regime, they urge a rebalancing of the three pillars of the NPT; they warn, “The lack of balance in the implementation of the NPT threatens to unravel the NPT regime.”⁹⁸ Similarly, dismayed by the erosion of their prerogatives under the NPT and the continuing pressure to restrict their options still further, the NAM seeks reaffirmation of their full rights as they see them: “Concerns related to nuclear weapons proliferation shall not in any way restrict the inalienable right

97. See, for example, “ACA Applauds New Guidelines on Sensitive Nuclear Technology,” Arms Control Association Press Release, June 27, 2011, <http://www.armscontrol.org/print/4936>.

98. “Statement on Behalf of the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons at the General Debate of the Second Session of the Preparatory Committee for the 2010 Review Conference of the States Parties to the Treaty on Non-Proliferation of Nuclear Weapons,” 2.

of all the States Parties to develop all aspects of nuclear science and technology without discrimination.”⁹⁹

Just as Washington and its supporters seek to constrain NNWS, those on the other side of the divide propose an array of measures intended to constrain the NWS or to limit the threat they might pose to NNWS. Worried about being threatened or bullied by nuclear-armed powers, they call for legally binding and unconditional security guarantees; NPT members should not have to fear nuclear threats. Alarmed by frequent discussions of the use of force as a response to perceived proliferation threats (in the case of Iran, for example), they propose a multilateral, legally binding instrument prohibiting attacks on civilian nuclear facilities. Frustrated by the perfunctory commitment of the NWS to their disarmament obligations and unsatisfied by the token maneuverings of those states to make it seem as if they are taking Article VI seriously,¹⁰⁰ they push for (and, indeed, have been doing so for a long time) a legally binding convention that would prohibit nuclear weapons and for the establishment of a date by which nuclear disarmament must be achieved; they also call for recommitment to intermediate steps, such as the CTBT and the FMCT, which the NWS had agreed to implement in past NPT review conferences. Exasperated by what they see as noncompliance by the NWS (even as the NWS insist on strict compliance by other states), they have called for a “mechanism to verify the compliance of the NWS with their obligations.”¹⁰¹ This is certainly not what Washington and other NWS have in mind when they raise the problem of NPT compliance!

Thus, competing conceptions of the NPT system are accompanied by competing programs for reform of the regime. Each side of the divide seeks with, at best, incomplete success to promote and protect its own interests and priorities while attempting to use the reform process to impose constraints on or score points against the other side. Much NPT diplomacy has involved each side working to thwart the initiatives of the other; at the 2010 Review Conference, as Harald Müller has pointed out, this was one of the main dynamics in play: the NWS resisted firm commitments and deadlines on disarmament while the NNWS blocked reform proposals aimed at strengthening the regime.¹⁰² The NAM re-

99. NAM Working Paper, 9. See also Yvonne Yew, “Diplomacy and Nuclear Non-Proliferation: Navigating the Non-Aligned Movement,” Discussion Paper 2011-07, Belfer Center for Science and International Affairs, Harvard Kennedy School, June 2011, esp. 4–5.

100. For a typically cynical view, see Manpreet Sethi, “Universal Nuclear Disarmament: What Can India Do?” *Cadmus* 1 (2) (April 2011). Sethi says that there has been no progress on disarmament due to “lack of sufficient political will” on the part of the NWS (p. 121). She dismisses arms control and disarmament moves of the NWS as “being done with one eye at the Review Conference of the NPT” and as part of a calculated attempt “to retain the NPT as a viable non-proliferation tool.” She warns that it would be unfortunate if this caused NNWS “disillusionment” and “loss of commitment” to the treaty (p. 124).

101. “Statement on Behalf of the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons at the General Debate of the Second Session of the Preparatory Committee for the 2010 Review Conference of the States Parties to the Treaty on Non-Proliferation of Nuclear Weapons.”

102. Harald Müller, “A Nuclear Nonproliferation Test: Obama’s Nuclear Policy and the 2010 NPT Review Conference,” *The Nonproliferation Review* 18 (1) (2011): 219–236.

form agenda is no more agreeable to Washington or the other NWS than the Western agenda is to the NAM. Hence the frictions in the regime, the occasional failed review conferences, and the recurrent fears that the regime could collapse. The regime is marked by serious collisions of interests and perceptions.

RESILIENCE DESPITE FRICTION AND DIVISION: SOURCES OF DURABILITY IN THE NPT SYSTEM

These disagreements cascade through the politics of the NPT regime. They arise at NPT review conferences and IAEA Board of Governors meetings, they influence proliferation-related votes at the United Nations, and they affect the reactions of states to proposals to strengthen the regime. The friction within the NPT system does not seem to be attenuating with the passage of time; on the contrary, it seems to be getting worse. Longtime NPT observer Mark Hibbs has noted, for example, that the IAEA Board (comprised of thirty-five member states), which long was able to operate on a consensus basis, is no longer able to do so. “During the last decade,” Hibbs writes, “consensus among the board members has unraveled and meetings have been marred by bitter divisions between advanced states and members of the Non-Aligned Movement.”¹⁰³ As this paper has sought to demonstrate, the schisms in the NPT regime are derived from different conceptions of the NPT bargain and different diagnoses of the flaws and needs of the system, which lead naturally to very different—sometimes flatly contrary—positions about what reforms are necessary or desirable.

A crucial question for the future, then, is how these deep divergences can be managed, minimized, or overcome so that the NPT regime can survive, perform adequately, and, ideally, be strengthened against the challenges it will face in the future. Beset with such contradictions, it may seem surprising that the NPT regime has survived as long as it has and functioned as well as it has. Two considerations help account for this outcome.

Political Diversity and Diplomatic Opportunity

No doubt the NPT system is divided, but the divisions within it defy easy categorization. Some of the broad frameworks commonly employed—the haves versus the have-nots, the North versus the South, the West versus the rest—capture some of the dynamics at work but are also imperfect and misleading guides to the complicated patterns of disagreement within the NPT. It is true, for example, that the NAM occupies a prominent place in NPT-related diplomacy and serves as a kind of focal point and clearinghouse for complaints about,

103. Mark Hibbs, “Reaching Consensus at the IAEA,” Carnegie Endowment for International Peace, September 13, 2010, 2, <http://carnegieendowment.org/2010/09/13/reaching-consensus-at-iaea/58p>. See also, ElBaradei, *The Age of Deception*, 119, in which he expresses concern that as early as 2003, under the pressure of the nuclear crisis in Iran, “the IAEA Board of Governors was beginning to split along North-South lines.”

objections to, and dissents from the Western nonproliferation consensus. It has been a useful platform and instrument for states, such as Egypt or Iran, that wish to voice their dissatisfaction with the regime. Without question, the NAM is an important part of understanding the diplomacy of the NPT regime. But it is a large organization that is far from homogenous. It matters much more to some members than to others; in her study of the NAM, Yvonne Yew divides its membership into leaders, spoilers, and others.¹⁰⁴ The latter group is large, and many of these states are fairly passive members. Furthermore, concern about the NPT regime is unevenly distributed among them. Yew notes that the loudest and most critical NAM voices are not necessarily representative of the views of many member states. It also may be the case that some NPT frictions or complaints are by-products of other, wider disputes—such as contention in the Middle East—and do not represent fundamental, regime-threatening grievances.

Perhaps most important in terms of managing the NPT and building support for desired strengthening of the system, the positions the NAM stakes out on NPT-related issues do not determine the stands taken by individual NAM member states. It is not unusual for countries to associate with a NAM paper or position but vote or behave very differently in their individual capacity. The NAM is very critical of the NPT process in a number of respects, but that does not make it impossible to capture support of NAM members. Hence, though NAM represents a majority of NPT member states, all is not lost in terms of building support for desired reforms.

Other groupings relevant to the NPT turn out to be similarly variegated when examined carefully. The NSG is a lightning rod for criticism from various recipient perspectives, and in some eyes it symbolizes the efforts of the haves to deprive the have-nots of their rights. This is a reality of NPT diplomacy. But it is also true that the NSG has grown to encompass forty-six members—approximately 25 percent of the membership of the NPT. It is no longer an institution that embodies merely the interests of a small group of major power suppliers. Indeed, its membership has begun to encompass states on both sides of these divides, including one member of the NAM (South Africa) and six states with NAM observer status (Argentina, Brazil, China, Croatia, Kazakhstan, and Ukraine). Because the NSG operates under a consensus rule, these NAM states have real blocking power if they choose to exercise it. Moreover, as the NSG becomes more inclusive, it may become easier to accommodate the supplier-recipient dialogue that many feel may help detoxify the Article IV dispute.

Some groupings that have been at least occasionally influential in the NPT context, such as the New Agenda Coalition (NAC), provide further grounds for optimism about the potential for successfully managing the NPT regime. The NAC has two attributes of note. First, it is a collection of seven middle powers (Brazil, Egypt, Ireland, Mexico, New Zealand, South Africa, and Sweden) that straddle the North-South divide. This mixed composition shows that the two sides of that divide can work together and that coalition building within the

104. Yew, "Diplomacy and Nonproliferation," 9.

NPT can take more complex forms than might be suggested by the image that the regime is broken into two rigid and testy camps. Second, the NAC is devoted to the cause of promoting nuclear disarmament, and it has pressed hard for more immediate and tangible steps on the part of the NWS to fulfill their Article VI obligations. NAC adds its voice to the chorus that is critical of the NWS for their failure to do more with respect to disarmament. But its dissatisfaction and criticism are offered in a context marked by the deep commitment of at least some NAC members (Ireland, New Zealand, and Sweden, for example) to the NPT. These states have taken up the Article VI cause, but they have no desire to harm or undermine the regime.

While criticism of and disaffection with the NPT regime are real, widespread, troublesome, and sometimes crippling, they coexist with cooperation, willingness to support some measures, and (at least for many NPT member states) a broad underlying commitment to the regime. This helps explain the persistently schizophrenic history of the regime: namely, that it is durable but chronically troubled. But it also means that progress in strengthening the regime, while generally difficult, is not impossible. As illustrated by the wide if incomplete acceptance of the Additional Protocol, it is possible to gather support that transcends the schisms in the regime. This diplomacy is likely to be slow and frustrating, but change can be achieved.

The Broad Common Interest

In the bickering and frictions that mark routine NPT diplomacy, it is easy to lose sight of the profound common interest that underlies the NPT. It is not that hard to understand that a heavily proliferated world—life in a nuclear-armed crowd—is not appealing and would bring with it additional significant risks and dangers. It is unlikely that many states will believe it to be in their interests to see such a world emerge; on the contrary, most states will not want to live in that world. It follows logically from this proposition that whatever their vexations with the NPT regime, most states will still perceive a fundamental interest in preventing proliferation—and hence in preventing the destruction or the erosion of the NPT regime, which is widely regarded as a significant barrier to proliferation. This shared interest does not prevent deep friction within the regime, but it does contribute to its durability and may place limits on the intensity of contention within the regime.

These two considerations give the NPT staying power and provide some opportunity for progress. But is it possible to minimize or bridge the contradictions in the regime in order to facilitate the implementation of the nonproliferation reform agenda?

CONCLUSION: PRESCRIPTIONS FOR MINIMIZING FRICTION

It would be naive to think there are easy solutions to patterns of behavior that have been evident for decades, but several possible prescriptions are implied by the grievances of the have-nots or suggested by the dysfunctional interactions between the NWS and the NAM.

Interests, Not Rights

Many in the have-not community see major portions of the NPT reform agenda as an assault on their rights as conferred by the NPT. This is particularly true in the context of the Article IV controversy, but is also relevant to the Article X discussion. A perceived attack on rights provokes resentment and resistance. Even states that have no interest in pursuing a particular path turn out to be reluctant to forfeit the right to do so. Hence, it is not productive that issues come to be framed in terms of threats to and defenses of rights under the NPT treaty—which is precisely the context Iran, for example, has sought to establish in its nuclear confrontation with the IAEA and the West.

Nor is it helpful when rights that NNWS regard as integral to the regime and as primary benefits of NPT membership are treated as flaws and loopholes. It may be particularly damaging when reform initiatives are framed in ways that seek explicitly to truncate or eliminate rights. Some of the early nuclear fuel assurance schemes, for example, were made conditional on recipient states relinquishing their rights to enrichment and reprocessing. This approach “poisoned the well,” as ElBaradei has explained. “The countries without advanced nuclear technology came to view each subsequent proposal with suspicion—as a series of ruses designed to rob them of their rights.” The consequent “distrust between nuclear haves and have-nots,” he continues, came to “dominate the back corridors of international nuclear diplomacy.”¹⁰⁵ The narrative of “rights under assault” is sufficiently established that it may require a concerted campaign of reassurance to undo it. Contesting this narrative will not be easy, not least because states subject to sanction for violations will have every incentive to frame their controversies in terms of the rights to which they are entitled rather than the wrongs they have committed. But it will be impossible to avoid collisions over rights if advocates of reform are in fact proposing to circumscribe or retract rights.

It will probably be more effective to concede rights and argue on the basis of interests. Enrichment, for example, is so costly and so unnecessary (given the existence of a robust nuclear fuels market) that in anything like current market conditions, it makes little sense for any state whose motives are purely peaceful. Fuel assurances or reserve stockpiles can offer insurance against market disruptions. If there is a winning argument, it is not that states have no right to enrich but that it is not rational or profitable to enrich. It is not clear that this approach

105. ElBaradei, *The Age of Deception*, 134.

will be successful in every case (some states may not have entirely peaceful motives, for example), but it is clear that tussles over rights should be avoided.

Economic Realities, Not Symbolic or Advocacy Politics

The ability to make convincing interest-based arguments would be enhanced if it were possible to inject realistic economic calculations more regularly into nuclear deliberations, fully taking into account all the relevant macro- and micro-economic considerations. Nuclear power plants and nuclear fuel cycle facilities are relatively expensive across the board, requiring substantial up-front investment and large capital costs. Indeed, Henry Sokolski has suggested that the off-putting cost structure of nuclear power has been a serious benefit for the NPT regime, significantly inhibiting the spread of nuclear technology.¹⁰⁶ But advocates in national programs often put forward optimistic cost estimates, which can result when some key costs are not included (waste disposition and plant shut-down costs are often left out, for example), or when not properly accounting for subsidies, or when underestimating costs.

Realistic cost estimates might make many nuclear paths—including fissile material production—seem much less attractive. Perhaps there should be some mechanism or process that promotes serious discussion of likely costs with countries that are contemplating a nuclear program and making fuel cycle choices. This will be a sensitive matter because commercial interests will be in play, and vendors will be concerned about their competitive position and their proprietary information. Nevertheless, it does not seem wise to let nuclear decision-making move ahead on the basis of shaky or misleading economic analysis.

Universal Means Everybody

It is very difficult to maintain credibly the claim that the NPT is a universal regime when there are so many exceptions to the rules of the regime. This property of the NPT system is what leads to the frequent claims of unfairness, hypocrisy, and double standards. As the International Institute for Strategic Studies has put it, “Shoring up the nuclear nonproliferation regime is a global task. Rules and constraints that are not universal in their application can too easily be rejected as unfair and illegitimate.”¹⁰⁷ If the United States and other NWS would exempt themselves less frequently, bend the rules less often, and conform occasionally even to rules or obligations they find onerous or inconvenient, it would reduce the sense of injustice and grievance that is so common in the regime today.

106. See, in particular, Henry Sokolski, “Nuclear Power, Energy Markets, and Proliferation,” in *Nuclear Power’s Global Expansion: Weighing Its Costs and Risks*, ed. Henry Sokolski (Carlisle, Penn.: Strategic Studies Institute, December 2010), 3–51.

107. *Nuclear Programmes in the Middle East*, 151–152.

Consultation, Not Imposition

Though there are venues, such as the IAEA Board of Governors, in which diverse views are represented, many on the have-not side of the equation feel that their voices are not heard and their interests are not taken into account. In institutions such as the NSG, consequential decisions affecting their interests are taken without their participation. The suppliers' cartel deliberates and then the rest of the regime is told what they must do. Among other outcomes, this mechanism leads NNWS to believe that their interests are being abridged; the NSG puts additional burdens on them beyond what was agreed in the NPT or IAEA safeguards agreements. Out of this dynamic come recurrent calls for more dialogue or consultation between recipients and suppliers, have-nots and haves, opinion leaders in the West and among the rest. There is a risk that trying to advance dialogue will grow unwieldy or replicate the scale and commotion of the NPT review conferences—which is one context in which all members have some voice. But finding some practical way of satisfying the thirst for more dialogue might help detoxify the NPT scene.

Voluntary, Not Mandatory

More than a hundred states have voluntarily signed the Additional Protocol, yet even some of those signatories opposed making the Additional Protocol mandatory (for example, by making it a condition of supply of nuclear technology). States resent being forced to comply with measures they had no hand in formulating; they dislike being compelled by other states to take on burdens they had not agreed to assume; and, as already noted, they resist reforms that would deprive them of their rights. As ElBaradei has pointed out in response to the Bush administration's proposal to prohibit any further spread of nuclear fuel cycle capabilities, it is not likely to be fruitful to go down a path that denies member states their rights; "success would be more likely," he says, by pursuing a voluntary moratorium.¹⁰⁸ Given that the pursuit of mandatory measures produces backlash and anger, perhaps the Additional Protocol offers the more effective model: make it voluntary but work to persuade states to join.

These measures offer no panacea, but if pursued they may help reduce the distemper of a deeply divided regime. The NPT cannot be strengthened and effectively adapted for a challenging future without substantial buy-in from the large mass of presently disaffected states, reflected in the NAM. Understanding, respecting, and responding effectively to the perspectives of those states is necessary if the regime is to evolve in desired ways.

108. ElBaradei, *The Age of Deception*, 131.

A Different Point of View on Reform of the Nonproliferation Regime

Wael Al-Assad

It is almost impossible to maintain absolute objectivity when commenting on an issue as controversial as the reform of the nuclear nonproliferation regime. This topic carries within it long-term political, and even cultural, biases and misconceptions by all parties across the divide. Steven Miller's paper is one of the very few I have read that attempts to provide a balanced presentation of the disagreements over the effectiveness, efficiency, relevance, and credibility of the regime.

The paper comprises three distinct parts: the introduction, the panoramic description and analysis of the problems (and their roots), and the conclusions. I take note of this division because my evaluation of the quality of each part is different.

THE INTRODUCTION

- Miller's introduction refers to an emerging agenda for reform and notes that "large constellations of states (such as the Non-Aligned Movement) reject or dispute substantial portions of the reform agenda." This statement gives the impression that the NAM opposes reform per se. In fact, there is no one agenda for reform, and the NAM has its own agenda based on the three pillars of the NPT, not the nonproliferation reform agenda alone. Miller slightly corrects and clarifies this point later in the essay, but his early statement could be misleading.
- Miller argues that the durability and adaptability of treaty regimes depend on the attitudes and perceptions of the states that participate in the arrangements. Thus, the adaptability, durability, and future of the NPT must be evaluated in light of the growing discontent of many members within regime. When viewed in this way, a very negative picture of the future of the regime emerges.

- Miller describes the history of the NPT as “schizophrenic,” which is an accurate and appropriate term to use. From an Arab perspective, the treaty was originally conceived as a three-legged bargain—nonproliferation by NNWS, disarmament by NWS, and rights to peaceful uses of nuclear energy—and Miller clearly lays out this point of view. However, the treaty, from its inception, has been of a transitional nature; it is more of a road map leading to the overall objective of nuclear disarmament. It is for that reason only that NNWS have tolerated being party to a discriminatory treaty that has two classes of membership, each with different sets of rights and obligations. The NPT was never intended, by default, to be permanent; the expectation was that each class of members would eventually fulfill its obligations under the treaty. Yet when the NPT was extended “indefinitely” in 1995, it created the misperception (at least to some members) that “indefinitely” means “permanently.”

THE PANORAMIC DESCRIPTION AND ANALYSIS OF THE PROBLEMS

In this part of the paper, Miller clearly and objectively describes the different aspects of the nonproliferation regime, the different opinions about the regime, and the obstacles facing it. This section considers the criticism that each group has of the other and how each perceives the NPT. Miller focuses on a number of important and controversial issues, such as rights to the peaceful uses of nuclear energy; the universality of the treaty; reinterpretations of the different articles, particularly the withdrawal clause; and the establishment of a nuclear-weapons-free zone in the Middle East.

The nonproliferation regime has faced serious crises ever since its inception, but this has been particularly the case since the end of the seemingly successful 2000 NPT Review Conference.¹ The multilateral community has been divided over a host of controversial issues relevant to the regime, including: compliance and noncompliance; universality of the NPT; the status of the three non-NPT members (India, Israel, and Pakistan); nuclear disarmament, including reductions in strategic and nonstrategic nuclear arsenals; modernization and replacement of nuclear weapons systems; preventing nuclear terrorism; concerns about nuclear doctrines and policies, including the use of nuclear weapons; security assurances; the CTBT and FMCT; IAEA safeguards and the Additional Protocol; export controls; nuclear-weapons-free zones, especially in the Middle East; concerns relating to the nuclear programs of Iran and North Korea; nuclear energy rights under the treaty; the dilemma of nuclear fuel supply versus the proliferation risks posed by fuel enrichment; the destabilizing force of the U.S.-India nuclear deal; and the questions related to the right to withdraw from the NPT.

1. Success should be measured by results and implementation and not by simply agreeing on resolutions and documents that no one intends to implement.

These are serious differences and points of contention; however, they are also symptoms of far deeper problems:

1. The discriminatory nature of the NPT has created two classes of members: the haves and the have-nots.
2. The imbalance between the negotiating powers of the two groups has led many to judge the regime as biased and coercive.
3. Structural deficiencies in the treaty prevent serious progress; these include an “institutional deficit”: that is, the lack of direct and effective structures or mechanisms for NPT parties to address issues of compliance, implementation, accountability, and withdrawal. Miller touches on this topic, but I believe it requires further analysis.
4. There is a disconnect between the three pillars of the NPT, with NWS focusing on nonproliferation and compliance while NNWS insist that disarmament by NWS is an integral part of the commitments under the treaty.
5. International discourse on nonproliferation has been distorted into talk of “responsible” and “irresponsible” states, and the different rights of each category, without establishing criteria to determine what constitutes a responsible state and who has the authority to stigmatize or classify states.
6. Certain groups and powers have attempted to reinterpret the NPT to serve their interests.

Miller discusses some of these six issues, but not all. Addressing these issues head-on would help advance the debate around an amended reform agenda.

THE CONCLUSIONS

- Miller’s conclusions appear not to be solutions to the problems, but rather an enumeration of ways for the haves to overcome the oppositions of the have-nots.
- In his subsection “Political Diversity and Diplomatic Opportunity,” Miller brilliantly analyzes the NAM opposition and exposes its weaknesses. But he then goes on to explain how to overcome NAM opposition to the Western reform agenda! We must start by merging the different sides and then amending the reform agenda into something comprehensive and viable that takes these various perspectives into account. Certainly, this is a more difficult task, but we must work on gathering support for it.

- “The reform agenda” should not be used as shorthand for what is in fact the Western nonproliferation reform agenda.
- On “The Broad Common Interest,” I agree that the majority, if not all, of the states parties to the NPT would prefer what the treaty offers as opposed to living in a heavily proliferated world. However, Miller frames this idea as if those are the only two alternatives available, and as if working toward a more balanced agenda that includes disarmament is not possible or practical.
- On “Interests, Not Rights,” I agree that denying rights will produce resentment; but claiming that “it is not rational or profitable to enrich” is also controversial. Equating rationalism with profitability is not a winning argument, because when it comes to states’ security, profitability is not the only motive for attempting to develop the full nuclear fuel cycle. States that refuse the profitability logic should not automatically be viewed as harboring nonpeaceful motives! Some states may deem it more beneficial to their security to enrich rather than be under the thumb of other producers or at the mercy of shortages in the market.
- In terms of “Universal Means Everybody,” I fully subscribe to Miller’s conclusion, particularly his point that “if the United States and other NWS would exempt themselves less frequently, bend the rules less often, and conform occasionally even to rules or obligations they find onerous or inconvenient, it would reduce the sense of injustice and grievance that is so common in the regime today.” Yet I have to admit that this sentiment is more wishful thinking than practical mechanism.

In summary, Miller’s essay offers one of the most objective viewpoints that I have read on the obstacles and challenges facing the nonproliferation regime. It covers most of the important areas of contention, analyzes the major players and their positions, and resists judging whether the cup is half-full or half-empty, opting instead to give a comprehensive view of the entire cup. Miller’s conclusions are controversial, but this is to be expected when dealing with such a controversial subject.

The NPT: A Bear Pit or Threshold to a Nuclear-Weapons-Free World?

Jayantha Dhanapala

Commentators on the NPT usually fall into two categories. One group, the nationals of NWS and their allies, believe in arms control (as distinct from disarmament) predicated on the retention of nuclear arms by the five NWS and the strict prohibition of any proliferation of these weapons to other states. Their commentaries are preoccupied with dangers to the NPT arising from breakouts from the regime, with the current suspects being Iran, Syria, and North Korea (although the latter has already announced its withdrawal from the NPT, has conducted two nuclear tests, and is believed to have a small arsenal of nuclear weapons). A second group comes from NNWS, largely from countries within the NAM. These commentators believe in both arms control *and* disarmament, and they identify the lack of progress by NWS in implementing Article VI as equally, if not more, important in comparison to the core Articles I and II. They see the NPT as a transitional stage toward a nuclear-weapons-free world.

The debate revolves around, on the one hand, a common identification of three pillars that support the NPT—nonproliferation, disarmament, and peaceful uses of nuclear energy—and, on the other, a sharp disagreement over the comparative importance of each pillar. That disagreement is routinely papered over with adroit diplomacy and drafting skills at NPT review conferences, when a final document can be agreed upon by consensus. But the discord invariably reappears as the next review conference approaches. The mutual recrimination between the NWS and their allies and the NNWS is largely mirrored in the academic community.

Steven Miller's paper, however, is a refreshingly frank and realistic assessment of the NPT, providing readers with a snapshot of the treaty's current status and containing practical suggestions for its improvement. He begins with the fundamental recognition that the NPT regime, like all other treaty-based international legal regimes, rests on the principle of consent among sovereign states. For a large number of NAM countries, that sovereignty has only recently

been regained after a dark period of colonialism. The Westphalian system of the nation-state may seem to be phasing itself out in more developed countries, with the rise in regional and global constructs; although even these, such as the euro zone, appear to be under stress. Ethno-nationalism and religion are also threatening to break up large states, encouraged—ironically—by Western democracies in the name of human rights. Christian South Sudan is the 193rd member of the UN, and the dramatic Arab Spring that has drawn selective intervention from the UN Security Council has seen NATO action only in oil-rich Libya, while ferment in Bahrain and Yemen continues. Thus, for the NAM, sovereignty and independence are fundamental issues and any attempt to curtail them—such as by imposing the Additional Protocol as a mandatory qualification for Article IV benefits or by reinterpreting Article X—will be met with resistance. The original drafting of the NPT, it should be remembered, is perceived by most NNWS as a hegemonic Cold War exercise between the United States and the Soviet Union that made amendment procedures virtually impossible.

Today, the NPT must be viewed in a global context in which the political and economic power of the West, in general, and the United States, in particular, is in decline. The center of gravity in global power is shifting gradually to the global South, especially in light of the strong resurgence of the Chinese and Indian economies. The problem of Security Council reform is similar to NPT reform. Another important aspect of the global context is the demand for nuclear power, which is likely to continue despite the accident at the Fukushima Nuclear Power Plant in Japan. The pressures of climate change have led to demands for carbon-free energy, and despite its costs and risks, nuclear power is an attractive option for many countries. We also have to contend with aggressive nuclear power suppliers that offer appealing terms for the reactors they sell. These suppliers now include countries outside the developed West and Russia, such as the Republic of Korea. Thus, more NNWS will want to exercise their Article IV rights to peaceful uses of nuclear energy.

It is vital that there be a level playing field for countries and that safeguards do not infringe on sovereignty. Perhaps the IAEA should follow the unique tripartite structure of one of the oldest international organizations—the International Labor Organization—which has governments, employer organizations, and trade unions represented. This structure gives an equal voice to workers, employers, and governments, ensuring that the views of the social partners are closely reflected in labor standards and in shaping policies and programs. Governments, the nuclear industry, and civil society could have a similarly structured organization within the IAEA to ensure that Article IV benefits are made accessible in a wise and equitable fashion. Any such organization would strengthen both the IAEA and the NPT.

Miller attempts to identify the colliding visions within the NPT, and he sets about his task methodically. “It is almost as if there are two NPT regimes,” he asserts. Following the conclusion of the NPT, other developments have exacerbated the dichotomy between NWS and NNWS. There was Israel’s

undeclared crossing of the nuclear threshold, for example, and the seemingly uncritical acceptance of this move by the Western nuclear powers. Israel is an outlier state with a policy of nuclear ambiguity, neither confirming nor denying possession of nuclear weapons. Some leaks have been hastily plugged, and whistle-blowers like Mordechai Vanunu have been effectively silenced. The origins of the Israeli nuclear program go back to the late 1950s; and by 1970, Israel was reported to have crossed the nuclear threshold. France was believed to be the source of nuclear expertise and material in the early stages of Israel's program. By the 1980s, Israel was understood to have a mature nuclear weapons program based around Dimona. The other outlier favored by the United States and the West is India. Miller honestly concludes that the impact of the U.S.-India nuclear cooperation deal has "been more damaging than anticipated." Indeed, the United States has still to reap any economic benefits from the deal. The third instance of NWS contradictions, or double standards, is with respect to extended deterrence and the stationing of U.S. nuclear weapons in Europe.

Miller's analysis of the reform proposals shows wide differences between NWS and NNWS on fissile material production; on the issue of not engaging in enrichment or reprocessing; on export controls, especially the functioning of the extra-NPT body, the Nuclear Suppliers Group; and the many other reforms proposed by both NWS and NNWS. He argues that "competing conceptions of the NPT system are accompanied by competing programs for reform of the regime." Having so accurately described the "serious collisions of interests and perceptions" in the NPT regime, what are Miller's own prescriptions?

Miller recommends two processes by which the deep divisions within the NPT can be managed. The first is through the very political diversity of NPT states parties and the fact that the NAM is a movement and not a rigid organization—which permits ad hoc groups like the New Agenda Coalition to emerge and function as bridge-builders in the successful adoption of a final document, as it did at the 2000 NPT Review Conference with its thirteen "practical steps." The other process Miller identifies is the bonding over a common interest in preserving the norms of the NPT regime. Miller believes that a focus on interests, not just rights, will enable a more rational approach to emerge. Economic interests should be highlighted in areas such as the construction of new nuclear power plants. Considering common interests would also entail more consultation than imposition, more focus on voluntary measures than mandatory ones. Miller is right in both of his recommendations, but my disappointment is that he does not go beyond them.

There needs to be a better understanding of the wellsprings of NNWS and NAM approaches to the NPT. In the 1960s, when a large number of Asian and African countries entered the UN, the decision-making that took place in international forums evolved from a voting-by-numbers game favored by the developed countries into a consensus model. The majority favoring the developed countries became a "tyranny" when the same rules favored the developing countries. And so consensus became the ideal and has indeed been the practice in the

NPT, with voting wielded only as a threat (to say nothing of whether that voting would be by secret or open ballot). This transition has helped create a better atmosphere for consultation, but it must be a consultation among equals as sovereign countries. Against this backdrop, it is indeed surprising that the NAM has had inadequate attention from Western scholars. Western diplomats react with derisory incomprehension over the NAM and question its post-Cold War rationale. The NAM riposte is to question NATO's *raison d'être* now that the Cold War is over, as well as its functioning beyond the North Atlantic.

Filling the gap and complementing Miller's thoughtful essay is the welcome publication of a book by William Potter and Gaukhar Mukhatzhanova. *Principles vs. Pragmatism: The Nuclear Politics of the Non-Aligned Movement*, which Miller himself refers to in his essay, is based on scholarly research enriched by direct personal experience at NPT conferences; it reveals a depth of understanding rare in Western research on NAM in the context of nuclear disarmament and the NPT. The book comes out of the James Martin Center for Nonproliferation Studies at the Monterey Institute of International Studies, a well-known center of excellence that has long fulfilled the task of bridging differences between NWS and NNWS with regard to disarmament norms.

The book's four parts explore the basis for the NAM; the movement's machinery; a set of case studies on specific issues; and the future of the movement, especially in terms of Iran taking over the NAM chairmanship. The authors' understanding of the subject, based on personal interviews with key NAM diplomats and their observance of NAM diplomacy in NPT gatherings, is deep and commendable. They see the differences of opinion and inconsistencies as part of the loose structure of the NAM, noting that even more rigid organizations like the EU and NATO have their own differences. Not all of the NAM is within the NPT. The authors distinguish between NAM's unequivocal support for nuclear disarmament and the lack of emphasis on nuclear nonproliferation, while also considering the different attitudes toward the IAEA's Additional Protocol, among other issues. They also help add context to the fears over Iran assuming the NAM chairmanship, citing historical precedents such as the chairmanship by Cuba.

As I expressed at the conclusion of the 2010 NPT Review Conference, the relief that the NWS felt over the adoption of the final declaration's conclusions and recommendations and the lukewarm reaction from NAM states and pro-disarmament NGOs signified that we had only bought the NPT another five years. The tensions endemic in the central bargain of the NPT remain. Good-faith implementation of the 64-point action plan as laid out in the final document will be crucial, as will progress on the New START along with ratification of the CTBT by the United States. The future course of the six-nation talks on North Korea, the resolution of the questions over Iran's nuclear program, and the outcomes of the 2012 Middle East nuclear conference will also determine the future of the NPT. The treaty has survived another challenge, but without further action by NWS and their allies—they alone have the power of decisive action in achieving a nuclear-weapons-free world—the NPT will wither away.

Living with an Imperfect NPT

C. Raja Mohan

Steven Miller's survey of the current discord in the nonproliferation system focuses on the abiding concerns of the developing and non-aligned world and the negative impact these concerns have on efforts to reform the NPT system. The conflict between the zeal and self-righteousness of the Western nonproliferation community, on the one hand, and the preoccupation with equity and balance as expressed by the nuclear elites within the NAM, on the other, has affected the legitimacy and credibility of the NPT in recent decades. This conflict, however, is unlikely to be resolved through legal and technical fixes. Nor is a "perfect NPT" that satisfies one and all within political reach. In the real world, a flawed NPT is probably better than none at all. The challenge to the NPT system today is whether it can adapt to the changed international context in a pragmatic manner.

Unfortunately, discrimination is designed into the NPT. No amount of arguing between the West and the NAM will overcome this structural deficit of the treaty. As Miller rightly points out, the current attempts to reform the NPT are seen in the NAM as tightening the "obligations" of NNWS while doing little to compel NWS to implement theirs. Friction arises over expanding the commitments of NNWS under Article III, which deals with safeguards and international monitoring. Other troubled attempts at reform have involved limiting the "rights" of NNWS under Article IV, which promises liberal international access to all peaceful uses of nuclear energy. Article V, on the conduct of peaceful nuclear explosions (PNE), is a virtual dead letter, thanks to India's claim that its first nuclear test in 1974 was a PNE. No one is betting that Article VI, which calls for general and complete disarmament, will be implemented anytime soon. There is a debate on closing the Article X "loophole," which allows NNWS to withdraw from the NPT.

In essence, the NPT is about preventing the proliferation of nuclear weapons. Neither eliminating nuclear weapons nor promoting peaceful uses of nuclear energy has been given the same level of priority as nonproliferation. To suggest that there are three "equal pillars"—nonproliferation, disarmament, and peaceful uses—undergirding the NPT is an argument that was popularized by India and other developing countries of the NAM. It has no basis in the negotiating record of the NPT. While the sponsors of the treaty—the United States,

United Kingdom, and Soviet Union—were willing to make vague reference to general and complete disarmament, it has always been fanciful to suggest that there was a “grand bargain” on the issues of nonproliferation and disarmament in concluding the treaty. Despite the occasional lip service paid to Article VI by sections of the nonproliferation community in NWS, the proposition that great powers would abandon their nuclear weapons *because* of their NPT “obligations” requires a leap of faith. Article VI might be a good political stick to use against the NWS, but it is by no means an effective one in the real world.

The unhindered right to peaceful uses of nuclear energy was an important topic in the drafting of the NPT. The issue was of some concern to the leading nations of the developing world; but their plans for developing nuclear power were largely aspirational in the 1960s. The question of peaceful uses was of greater interest to many European states, which had the technical capability and political intent to build significant atomic energy development programs. As Albert Wohlstetter recognized early on, states could use the civilian nuclear power route to develop nuclear weapons programs. (It is much simpler though to build weapons by constructing a small research reactor and a reprocessing plant to convert the spent fuel into weapons-grade material.) In addition, some states that have joined the NPT have cheated on their obligations as related to verification. Taken together, these trends underline the paradox that strengthening the NPT necessarily involves making it more discriminatory and unequal. For countries that have voluntarily given up nuclear weapons, the latest denial of enrichment and reprocessing technologies need not be debilitating to a nuclear power program. Ironclad fuel supply assurances and mechanisms such as an international nuclear fuel bank could contribute reliably to planning for nuclear power production.

After four decades of implementing the NPT, we have some reason for optimism. One fact, as Miller rightly points out, is that the NAM is not a cohesive group. If it were, the NAM would by now have altered the framework of the NPT in favor of the developing world. The NAM had significant leverage on the future of the NPT when it came up for review and extension in 1995. Deep divisions within the NAM, however, prevented the group from exercising its sway. Instead, the NAM had to settle for small pickings in return for an indefinite extension of the NPT. Another fact is that an overwhelming majority of the NAM, forming the largest bloc among the NPT members, has sought neither to develop large nuclear power programs nor to cheat on the treaty. The difficult cases have been few and have had little to do with the political divide between North and South or between haves and have-nots. Also, a large majority of the NAM is quite comfortable with the inherent inequity in the NPT system and remains unaffected by the problems of global nuclear order.

Finally, in multilateral forums, NAM diplomats routinely and vigorously express their resentment of the unilateral changes to the rules made by the West. But their influence on the political leaders and national security bureaucracies at home is not significant. The non-nuclear developing states in the NPT do not

seek to acquire atomic weapons because the NPT system is unfair. Some of them explore the nuclear weapons option because their security is threatened by their neighbors. Some fear regime change imposed by the great powers. For those that fall under these categories, the arguments about equity and justice are valuable tools in mobilizing domestic public opinion in favor of a nuclear weapons program or in justifying their defiance of the nuclear order. Some of these regimes have deliberately sought nuclear weapons programs as a useful bargaining tool with the West. North Korea has demonstrated the value of nuclear weapons programs in extracting political concessions from the international community. Libya's Muammar Gaddafi gave up the nuclear option as part of an effort to normalize relations with the West. Skeptics might argue that the West's intervention in Libya in 2011 only underlines the fact that regime change is easier when one has given up the nuclear option.

That point brings us to the question of the missing pillar in the NPT system: the security of states that forgo nuclear weapons under the treaty. Not surprisingly, the idea of negative and positive security assurances has been a large part of the NPT debate over the decades. Negative security assurances—that is, assurances (sometimes with caveats) not to use or threaten to use nuclear weapons against NNWS of the NPT—have often been delivered by the great powers. But such promises are neither here nor there. Where the great powers have given positive security assurances—in other words, where they have formed alliances, as in Western Europe and East Asia—the dike against proliferation has held firm (although the credibility of these alliance commitments could erode in East Asia in the face of China's rising power and new concerns about the credibility of U.S. extended deterrence). Great powers, however, cannot be expected to bear the burden of alliance commitments merely for the sake of preserving the NPT. Such commitments are inevitably related to the resources and national security priorities of each great power.

One important weakness of the NPT is the lack of an enforcement mechanism. The implicit assumption had been that the great powers, especially the nuclear superpowers, have a strong stake in preventing proliferation and would have the political will to punish those that violate the treaty. The record of the last few decades has made it difficult to put much stock in that assumption. Interests other than the defense of the NPT system have prevented the great powers from acting purposefully and in concert against presumed offenders. The blind eye that the United States has turned toward Israel's nuclear weapons as well as its readiness to countenance Pakistan's clandestine nuclear weapons program during the 1980s, when Washington needed Islamabad's support in bleeding the Soviet bear in Afghanistan, are two examples of nuclear realpolitik. When the United States actively promoted India's nuclear exceptionalism during a period from 2005 to 2008, China reacted by offering additional nuclear reactors to Pakistan, in violation of its earlier assurances to the NSG.

The increasing reluctance of Russia and China to follow the Western approach on Iran and North Korea highlights an emerging structural challenge to

the NPT system: the weakening of the United States and the West, especially after the global financial crisis of 2007–2008. If the NPT system eroded in the last two decades—at a time when American and Western power were at their apogee—its prospects under the emerging multipolar world could be much dimmer. The implications of this structural change in the coming years could far outweigh the recent West versus NAM arguments. Those who have endlessly complained about Western unilateralism with regard to the NPT will have a hard time coping with Western weaknesses in countering proliferation, a certain amount of which must be anticipated. If the West fails to reverse the nuclearization of North Korea and stop Iran’s nuclear weapons program, that will have a greater effect on the NPT system than all the divisive arguments that Miller analyzes.

Rather than searching for solutions within the narrow framework of the NPT, the focus of nonproliferation efforts in the coming decades should be on adapting to changes in the global distribution of power; building a great-power coalition (if not a concert) that can act outside the NPT framework to slow the proliferation of nuclear weapons; and maintaining effective regional balances to reduce incentives for nuclear weapons acquisition. During the last two decades, the enormous power gap between the United States and the rest has allowed the debate to be framed by the West in terms of presumed nonproliferation norms. The emphasis has been on legalistic arguments, technical solutions, and reliance on Western dominance in multilateral institutions. However, the nonproliferation community will not have these luxuries available in the next two decades. The premium will instead be on restoring a strategic approach to nonproliferation amidst a relative decline of the West and a steady diffusion of power in the international system.

How Do We Read the NPT?

Ta Minh Tuan

Steve Miller's paper is comprehensive, offering in-depth analysis of the debate over the NPT. He examines its weaknesses and how its member states view the treaty and use it as a diplomatic instrument to advance their national interests in the international arena. I would like to offer a few thoughts on some of the arguments that Miller puts forth in his paper.

1. In the section titled "Core Bargain or Design Flaw?" Miller argues that the NPT is inherently flawed, leading members of the nonproliferation community to interpret the treaty differently. Although both proponents and opponents have their own perceptions, that does not change the fact that the treaty has existed for more than four decades and has remained the centerpiece of the nonproliferation regime. This suggests that the original signatories of the NPT might not have differed sharply on the three pillars. They generally were able to reach compromise and agreement in order to adopt the treaty as it is. It would be a good idea to investigate briefly the question of why and how the NPT was agreed on in the first place. Did the original parties not see the "inherent weaknesses" and "loopholes"? Were those issues purposely left unresolved because the parties failed to reach a consensus, or did they concur on the three pillars? If the latter, does it mean that the problems arose only after the NPT had entered into force, becoming unintended points of contention?
2. Miller's discussion on whether the NPT is an "Instrument of the NWS or Expression of Collective Interest?" presents those conflicting notions of the NPT. Nevertheless, the interpretations share a common point: namely, that national interest is a priority. The frustration has run deep on either side of the divide, but the two sides still try to keep the NPT alive. Except for a few countries, such as North Korea, it appears that the member states cannot afford to stall implementation of the treaty completely. It does not serve nations' interests to insist on having their demands met without making any compromises. This fact could explain why we have seen progress on compliance with the NPT worldwide, no matter how small the progress has been. But what if we did not have the NPT? Do we have an alternative or a better option? Perhaps it is clear that the

and the have-nots ought to find ways to support the NPT, and that they do not dare kill it. This, in turn, suggests that we can encourage advancement of the legitimate interests in the NPT, while also insisting that both sides keep their promises. Blocking positive efforts to introduce reforms that would strengthen the nonproliferation regime is irresponsible, but adopting a double standard by failing to meet disarmament obligations is equally so. After all, the NWS have benefited the most from the NPT, so they should take tangible steps toward fulfilling their commitments before pointing the finger of blame at the NNWS. Fair treatment is a legitimate interest of the NNWS. Reducing nuclear arms to zero may be impossible to achieve in the foreseeable future, but we should not lose sight of this ultimate goal because it is the only way to assure that the agreement between the NWS and the NNWS is equitable.

3. Miller's analysis of the interpretation of Article IV is most interesting because it touches on the core of the contemporary debate over the NPT. The "inalienable right" to peaceful nuclear technology does not, of course, necessarily imply assured access to the nuclear fuel cycle. However, neither does it mean that the NPT member states are forbidden or denied nuclear fuel cycle capabilities. The terms of Article IV are open to different interpretations and to manipulation. But we will remain locked in this controversy if we do not consider the issue from a different angle. In fact, the current perspective obscures the real concerns of the NNWS:
 - (i) It is unfair to allow some countries to possess nuclear fuel cycle capabilities while barring all others, even when their nuclear programs are genuinely peaceful. This restriction significantly thwarts these nations' development and constrains their choices.
 - (ii) Though it is possible to purchase nuclear fuel in the international market, there is no way to ensure that the market will remain stable and reliable. Building nuclear power plants is very costly; therefore, no country is entirely comfortable depending on a foreign fuel supply to power its plants. Certainly, producing fuel domestically is a more secure option. Moreover, mastering nuclear technology is a matter of national pride, a feat that not many countries can accomplish and one that proves a nation's technological advancement and achievement. South Korea is a telling example. The NWS and nonproliferation advocates may not want to hear this argument, but the psychological aspect exists anyway and should not be ignored.
 - (iii) National security could constitute another reason for considering nuclear fuel cycle capability. Once a country possesses this capability, it is much less exposed to international pressure and thus has more space in which to conduct foreign policy. Nuclear power is not merely an economic issue but a security one as well. A threat to

cut off nuclear fuel supply when the recipients and the suppliers have diplomatic problems or even become antagonists could pose an immediate risk to a recipient state's national security. Policy-planners and policy-makers must foresee worst-case scenarios such as this and work out a contingency plan to respond to them.

Iran's case clearly reflects the anxiety of the nuclear have-nots with regard to the restrictions introduced by the NWS and their like-minded partners to curb the enrichment and reprocessing capabilities of the NNWS. Iran received offers from a number of international fuel suppliers, but all failed to give Iran sufficient assurance and confidence in their services. Stricter export control regulations and unilateral imposition of additional rules by the NSG only reinforce the belief that the international market is not reliable, as the recipients have no choice but to depend on the terms dictated by the suppliers. Most recipients feel even more frustrated by the NSG's recent actions. It remains the NSG's right to set regulations; however, rules that alienate recipients and fail to earn their support will bring dangerous consequences. First, the recipients could be compelled to develop indigenous nuclear technology, which in turn would mean uncontrolled proliferation. Notwithstanding the fact that such technology developed domestically may be much more expensive and less sophisticated, as India's nuclear industry has demonstrated, the nuclear have-nots could continue to venture into this area. Second, illicit trade of nuclear material and technology will spread more quickly if certain recipients seek them in the black market when needed. Hence, while the NSG's measures to strengthen the nonproliferation mechanism could be welcome, they should not be undertaken at the expense of the recipients. The more burdens the recipients are forced to shoulder, the more resentment they will have toward any reform proposal.

4. Miller frequently cites the NAM's position on various issues. Although the NAM often adopts a common stand on a number of sticky points related to the NPT, it has become clear that the movement is by no means a homogenous grouping. To consolidate their bargaining power vis-à-vis the NWS, NAM members have found ways to iron out their differences; but when it comes to voting, they will often act individually. Discrepancies exist largely because the NAM comprises both nuclear haves and have-nots. The interests of India, Pakistan, Indonesia, and Malaysia must differ, for instance, from those of Cambodia, Chile, and Sudan. NAM members that have a nuclear energy program should be more concerned about the NPT reform agenda or the NSG's new regulations on the transfer of nuclear technology than those members that do not intend to

develop nuclear energy. Thus, it is interesting to explore how the NAM has solved its own problems to reach consensus, such as that presented in the position paper it submitted to the 2010 NPT Review Conference. Although Miller briefly mentions the divide and struggle among NAM members, he should expand on that topic, thereby removing the wrong impression that the NAM is a strong grouping that works for the interests of all member states.

Miller's conclusion is extremely useful and well thought-out. However, I would suggest that he restructure this section and put the points and arguments under a new subtitle, something along the lines of "Some Thoughts about the Way Forward." This revision would highlight Miller's valuable suggestions and observations that could help policy-makers think through the various issues discussed in the paper.

Contributors

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