Deterring Safeguards Violations

James M. Acton

"Rules must be binding. Violations must be punished. Words must mean something."

- U.S. President Barack Obama, Prague, April 5, 2009

it should be assumed that sanctions will be imposed in response to anything other than the most minor of [safeguards] breaches."
UK Prime Minister Gordon Brown, London, March 17, 2009

Summary

- States attending the 2010 Non-Proliferation Treaty (NPT) Review Conference should clarify
 and emphasize that future non-compliance with nuclear safeguards will violate article III of the
 NPT, the obligation to accept safeguards.
- States should further agree that, in the future, the most serious cases of deliberate noncompliance with safeguards will be assumed to be a violation of article II of the NPT, the injunction against manufacturing nuclear weapons.
- These steps will increase the chance that future cases of non-compliance will be met with fast and effective action, thus enhancing the deterrence value of safeguards.

Introduction

The principal weakness of today's nonproliferation regime is enforcement. Specifically, the international community seems unable to authorize and implement quick and robust action when a state breaks the rules. When the International Atomic Energy Agency (IAEA) finds a state in non-compliance with its safeguards obligations, the responsibility for finding an appropriate response falls largely on the United Nations Security Council. Unfortunately, as the Security Council's dealings with Iran and the Democratic People's Republic of North Korea (DPRK) have demonstrated, forging consensus for action can be extremely difficult. Even before agreeing on what to do, there are inevitably arguments about whether any response beyond words is appropriate. These debates are partly due to the perception among some states that non-compliance with safeguards usually amounts to nothing more than minor reporting failures, and that it poses no threat to international peace and security.

Debates over how the Security Council should respond to non-compliance can literally take years. This delay undermines the essential deterrence value of safeguards. It is already a serious problem. If nuclear power becomes ever more widely used in response to climate change and concerns about energy security, it will only increase in significance. If the anticipated nuclear renaissance is not to turn into a proliferation renaissance, states must be made to recognize that if they are caught willfully violating their obligations, they and their friends will be unable to delay a meaningful international response for long.

The 2010 Review Conference for the Non-Proliferation Treaty (NPT) provides an important opportunity to address the challenge of non-compliance. The last Review Conference, in 2005, was a failure. Since then, however, the nuclear-weapon states, led by the United Kingdom and the United States, have tried to breathe life back into the grand bargain at the heart of the NPT; by recommitting themselves to work in good faith toward the abolition of nuclear weapons, they are hoping that others will reciprocate by agreeing to the steps that are needed to bolster the nonproliferation regime. Skeptics have argued that disarmament (or lack thereof) was never anything more than a convenient excuse for inaction by states that opposed strengthening the nonproliferation regime for other reasons. The 2010 NPT Review Conference provides a test of the new strategy. Success in forging consensus around enhanced nonproliferation measures would make it significantly easier for the United States and other governments to persuade their constituents of the concrete security benefits of disarmament.

Responding to non-compliance is a promising area for progress at the 2010 Review Conference, because it imposes no additional burden on states that are playing by the rules. The prospects for non-nuclear-weapon states (almost all of which are in compliance with their commitments) agreeing that additional obligations should be mandatory are not good. Thus agreement that all states

should accept the Additional Protocol (an enhanced safeguards agreement) is very unlikely.⁵ The Review Conference is not the right forum for addressing other steps, such as strengthened export controls, where the debate primarily takes place in the Nuclear Suppliers Group. In contrast, responding more decisively to non-compliance could be a more productive focus.

Why Safeguards Matter

The basis for the application of nuclear safeguards is the agreement that each non-nuclear-weapon state party to the NPT is obliged to conclude with the IAEA. This agreement, known as the Comprehensive Safeguards Agreement, sets out states' reporting requirements and the rights of the IAEA to conduct inspections to verify states' reports.

There is a widespread perception that violations of a safeguards agreement are not usually a proliferation concern. For example, the IAEA Board of Governors played down the seriousness of safeguards violations in the Republic of Korea by stating that "the quantities of nuclear material involved have not been significant" and by failing to make a formal finding of non-compliance. While safeguards violations can vary in their severity, the "small quantities" excuse is, by itself, a poor reason for not finding a state in non-compliance. After all, as the Board of Governors itself tacitly recognized in the case of Iran, a state can conduct all the research and development necessary to manufacture nuclear weapons with a small quantity of nuclear material.

Similarly, reactions to Iran's safeguards violations, particularly among non-aligned countries, also illustrate a worryingly permissive attitude toward non-compliance with nonproliferation agreements. For instance, those who argue that Security Council action against Iran is unjustified regularly point to the finding in all IAEA reports on Iran since November 2004 that there has been no diversion of declared nuclear material. Their tacit implication is that safeguards violations only become significant when a state has actually diverted nuclear material; lesser violations—such as reporting failures or refusing access to inspectors—do not represent a proliferation concern and can be more-or-less ignored. Indeed, few expressed concern over Iran's recent refusals to provide design information for its reactor under construction at Arak and to allow IAEA inspectors access to the facility.

The argument that it is the diversion of nuclear material, as opposed to reporting failures, that should set the benchmark for enforcement action is legally flawed since the diversion of nuclear material *is* the failure to report fully on its use!¹¹ Thus, trying to draw a distinction between "mere" reporting failures and the actual diversion of nuclear material is meaningless. Indeed, this is precisely why the IAEA does not claim in its six reports on Iran before November 2004 that there was no diversion of declared nuclear material;

there were diverted nuclear materials in Iran until it had rectified its past reporting failures and those corrections had been verified.

Moreover, downplaying safeguards violations is short-sighted from a policy perspective since reporting and inspections are central to the purpose of the NPT. Security is, as George Perkovich has remarked, the often-ignored "fourth pillar" of the NPT (nonproliferation, disarmament, and promoting the peaceful use of nuclear energy are the widely recognized three). The treaty's basic security logic is that a state will be more secure and less likely to acquire nuclear weapons if it is convinced that its neighbors (and any other states it worries about) are not proliferating. Similarly, the neighbors will also be more likely to refrain from proliferation if they are convinced that the first state is showing similar restraint. The transparency regime created by safeguards is central to this confidence building and therefore to the whole purpose of the NPT. For this reason it is self-defeating to dismiss intentional safeguards violations as minor technical issues.

Making Safeguards Matter

The problem of states' unwillingness to take safeguards violations seriously is compounded because it is unclear whether such violations also constitute non-compliance with the NPT. (There is not even a formal mechanism in the treaty for adjudicating compliance.) This is detrimental from an enforcement perspective because there is a sense among many states that safeguards violations are less serious than NPT violations. It is, therefore, easier for states to oppose robust enforcement action if safeguards non-compliance does not necessarily constitute NPT non-compliance.

Russia, in particular, has often argued behind the scenes against sanctions on Iran on the grounds that NPT violations have not been proven. ¹² Russian officials have not publicly set out their legal analysis, but respected analyst Alexei Arbatov reflected their thinking when, after describing Iran's nuclear program, he wrote that, "all this is not enough to accuse Iran of a formal breach of the letter of the NPT; after all, these activities may be dismissed as purely scientific endeavors or theoretical projects to hedge for possible future security threats...."

In fact, there is a very strong case for arguing that safeguards non-compliance does constitute a violation of article III of the NPT. This article obliges non-nuclear-weapon states to "accept" IAEA safeguards. It is certainly logical to argue that abiding by a safeguards agreement is an inherent part of accepting it (although a fuller analysis of this point would need recourse to the negotiation history of the treaty). Arguing the contrary would seem to rob article III of any distinctive meaning within the NPT. ¹⁴ After all, if accepting safeguards does not require complying with them then, except in the trivial case of "rejecting" an entire safeguards agreement outright, it would be impossible for a state to ever violate article III!

It is possible, although rather strained, to argue that safeguards noncompliance is not tantamount to article III non-compliance by pointing to a difference in wording between the NPT and the Comprehensive Safeguards Agreement. 15 According to the former, the aim of safeguards is to prevent the "diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices." The latter, however, sets out the aim as the detection of "the diversion of ... nuclear material from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices or for purposes unknown."17 One could argue, from this difference, that safeguards non-compliance only constitutes NPT non-compliance if the IAEA determines that nuclear material was diverted to the manufacture of nuclear weapons; indeed, this appears to be the essence of the Russian position. There are various counter arguments, including the fact that since the IAEA is not tasked with assessing states' intentions, the Russian position is unreasonable. 18 Another is the general principle of lex specialis derogat generali (a more specific law supersedes a more general one), which suggests that the more specific Comprehensive Safeguards Agreement should be used to clarify uncertainties in the interpretation of the more general NPT.

The weight of legal argument falls on the side of those who argue that safeguards non-compliance does constitute non-compliance with article III. Still, the Review Conference could usefully address the issue. Specifically, states party to the NPT should clarify and emphasize at the 2010 Review Conference that, in the future, non-compliance with safeguards agreements will violate article III of the NPT. Such a statement would be a clear signal of these states' intention to enforce safeguards agreements more quickly and effectively than to date.

Such a declaration would, of course, not predetermine the Security Council's response. Each of the permanent five members would still be able to veto any course of action they opposed. Indeed, if the Director General could confirm that a non-compliant state was cooperating fully and proactively, the Council might well choose to refrain from any kind of punitive sanction. But the declaration would help change the starting assumption among Council members from near indifference about safeguards violations to the supposition that they must be taken seriously.

It is worth emphasizing that the declaration would *not* amount to an amendment of the NPT. Indeed, there are clear precedents for the Review Conference taking similar steps. For example, article IV of the NPT asserts the "inalienable right" of states in compliance with articles I and II of the treaty to nuclear energy for peaceful purposes. Article IV does not explicitly condition this right upon compliance with article III. At the 2000 NPT Review Conference, however, states recognized, in the Final Document, that article IV rights do depend on compliance with article III. ¹⁹

Dealing With the Most Serious Violations

Much more controversial is a potential connection between safeguards non-compliance and non-compliance with article II of the NPT.²⁰ Article II contains the fundamental injunction on non–nuclear-weapon states "not to manufacture or otherwise acquire nuclear weapons." As discussed above, Russia has opposed sanctions on Iran on the grounds that its intent to manufacture nuclear weapons has not been proven. In contrast the United States has argued that the nature and scope of Iran's safeguards violations prove that it has violated article II.²¹

The Review Conference should try and clarify this issue. Because article II violations are the least likely to be overlooked, agreement that the most serious safeguards violations are tantamount to non-compliance with article II would be a significant deterrent to proliferation. Therefore, states at the 2010 NPT Review Conference should agree that, in the future, the most serious cases of deliberate safeguards non-compliance will be assumed to be non-compliance with article II of the NPT, as well as article III. Before suggesting how the "most serious" safeguards violations might be defined, a brief legal justification for this proposal is presented.

Article II of the NPT prohibits states from the "manufacture" of nuclear weapons. The meaning of this term is clarified in the treaty's negotiating history. Specifically, "facts indicating that the purpose of a particular activity was the acquisition of a nuclear explosive device would tend to show non-compliance" with article II.²² Under this interpretation, it is the *intent* behind a state's action that determines whether it is compliant with article II.

The IAEA is, however, neither legally entitled nor practically equipped to assess intent. At the moment, it is effectively impossible to prove an article II violation until it is too late (such as a non–nuclear-weapon state conducting a nuclear test). This is a deeply problematic situation but could be partially rectified by the Review Conference recognizing that the most serious safeguards violations constitute evidence of the intention to build nuclear weapons and hence can be assumed to violate article II.

For such an agreement to be practically useful, of course, states would have to agree which safeguards violations were the most serious. One possibility would be to define them as:

- the diversion of one significant quantity or more of nuclear material (whether in one large batch or multiple smaller batches) to an undeclared or unsafeguarded facility; or
- the unilateral termination of safeguards required by a state's safeguards agreement; or

 the failure to declare the construction of an undeclared uranium enrichment or plutonium reprocessing facility.

Apart from withdrawing from the NPT (another important issue for the Review Conference to address), it is hard to envisage a proliferator manufacturing nuclear weapons without taking one of these steps. In fact, if history is a guide, then the third route—acquiring fissile material illegally by setting up a dedicated clandestine production facility—is the most likely. This was the path being pursued by at least four of the five non–nuclear-weapon states that were found in non-compliance with their safeguards obligations (the DPRK, Iran, Iraq, and Libya). Small, clandestine centrifuge facilities, which probably pose the single most significant proliferation threat today, are exceptionally difficult to detect. Given that it is not certain that a state developing such a facility will be detected, effective deterrence relies on the consequences of being caught being great. For this reason, it is particularly important that the construction of undeclared enrichment or reprocessing facilities constitute an article II violation.

Conclusion: Making Enforcement Fairer and Tougher

Non-compliance with safeguards is a real and pressing problem. It threatens the long-term sustainability of the nonproliferation regime and is, therefore, a crucial topic for the 2010 NPT Review Conference to address. It is also a promising subject to tackle because it would impose no further constraints on non–nuclear-weapon states that are abiding by their obligations. On the contrary, it would enhance their security.

Developing a successful strategy for responding to non-compliance will require a long-term, ongoing process. The key is to develop country-neutral rules.

Today, the response to non-compliance depends as much on the state that is involved as on what it did. This is unfortunate as it erodes willingness to participate in enforcement actions. A fairer approach, and its advantages, have been well summarized by former IAEA Deputy Director General for Safeguards, Pierre Goldschmidt:

Before the next crisis occurs generic procedures for responding to noncompliance should be discussed and agreed upon. With a "veil of ignorance" about which states might be involved, such discussions should be easier and less acrimonious than in the heat of a crisis. Moreover, agreement upon a set of standard responses to be applied even-handedly to any state found in noncompliance—regardless of its allies—would significantly enhance the credibility of the nonproliferation regime.²⁴

The proposals advocated in this study advance that agenda. By equating safeguards non-compliance to NPT non-compliance, they make it harder for the international community to overlook a state that has broken the rules—whichever state is involved and whoever its friends are. In addition, because these proposals relate specifically to *future* safeguards violations, they cannot be accused of "moving the goal posts" for past cases of non-compliance—the Iranian case, in particular. This neutrality should be an attractive feature to those states that worry about the health of the nonproliferation regime but are also concerned by a history of discriminatory enforcement practices.

Many of the same states say that they have opposed tougher enforcement actions in the past because of another form of discrimination—discrimination between states that have nuclear weapons and those that do not. As the former renew their commitment to pursue the abolition of nuclear weapons, the latter should show that their words were more than just rhetoric by using the Review Conference to strengthen the NPT's system of enforcement. Doing so could help catalyze the virtuous circle of disarmament and nonproliferation that almost all states say they want to create.

Notes

¹ The IAEA Board of Governors is under a legal obligation to refer non-compliance to the Security Council. In the event that a state cooperates fully and proactively with the IAEA in rectifying non-compliance, the Board of Governors can—as it did in the cases of Libya and Romania—refer the state to the Security Council "for information purposes only." Legally (if not politically), however, the Security Council still has full freedom of action.

² The experience with Iran reveals a second problem, that of building consensus on the Board to refer a state to the Security Council in the first place. See Pierre Goldschmidt, "Exposing Nuclear Non-Compliance," *Survival*, vol. 51, no. 1, February-March 2009, pp. 143–164, http://www.carnegieendowment.org/files/goldschmidt_survival20090201.pdf.

³ George Perkovich, "Abolishing Nuclear Weapons: Why the United Sates Should Lead," Policy Brief no. 66, Carnegie Endowment for International Peace, October 2008, http://www.carnegieendowment.org/files/abolishing_nuclear_weapons.pdf.

⁴ For an important study of other ideas see Pierre Goldschmidt, "Concrete Steps to Improve the Nonproliferation Regime," Carnegie Paper no. 100, Carnegie Endowment for International Peace, April 2009,

http://www.carnegieendowment.org/files/improve nonpro regime.pdf.

⁵ The IAEA General Conference has adopted an annual resolution "requesting" states to accept the Additional Protocol. This is, however, a far step from making it mandatory.

⁶ See http://www.iaea.org/NewsCenter/News/2004/south_korea.html.

⁷ The Board did express "serious concern," but the failure to find the Republic of Korea in non-compliance made this statement look more like window dressing than a genuine rebuke. For a discussion of why a finding of non-compliance would have been merited see Goldschmidt, "Exposing Nuclear Non-Compliance."

⁸ The grounds used by the United States for assessing the severity of non-compliance are set out in Department of State, "Adherence to and Compliance with Arms Control, Nonproliferation and Disarmament Agreements and Commitments," August 2005, pp. 66–69, http://www.state.gov/documents/organization/52113.pdf. For an alternative framework see James M. Acton, "The Problem with Nuclear Mind Reading," *Survival*, vol. 51, no. 1, February-March 2009, pp. 130–134,

http://www.carnegieendowment.org/files/acton_survival20090201.pdf.

⁹ See, for example, "Excerpt from the Record of the 1094th Meeting of the Board of Governors," GOV/OR.1094, March 13, 2004,

http://www.iranwatch.org/international/IAEA/iaea-boardmeetingexcerpts-031304.pdf. This debate is fairly typical in that Non-Aligned Movement states make general calls for cooperation with the IAEA while avoiding specific reference to Iran's safeguards violations. In contrast, Western states tend to discuss, in depth, the specific violations and their severity. See also Tanya Ogilvie-White, "International Responses to Iranian Nuclear Defiance: The Non-Aligned Movement and the Issue of Non-Compliance," *European Journal of International Law*, vol. 18, no. 3, 2007, pp. 453–476.

¹⁰ For example, Michael Spies, "Limits on the Non-Proliferation Regime—And why Multilateralism is the Only Solution," The Nuclear Non-Proliferation Treaty: A Legal Framework in Crisis?, American University International Law Review Annual Conference, February 9, 2006, http://lcnp.org/disarmament/AU2006IranRemarks.htm.

¹¹ The term "diversion" is only defined in INFCIRC/26, the very first safeguards document. There it is defined to include the use of nuclear materials, facilities or equipment "in violation of any ... condition prescribed in the agreement between the Agency and the State...." Under this definition reporting failures certainly constitute a diversion. IAEA, "The Agency's Safeguards," INFCIRC/26, March 30, 1961,

http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc26.pdf.

¹² Personal communications, former U.S. diplomats and Russia analyst. See also "Block on Iran Sanctions: Russia Demands Proof of Hidden Program," *International Herald Tribune*, April 22, 2006, http://www.iht.com/articles/2006/04/21/news/russia.php; "Ahmadinejad Declares Victory in Nuclear Dispute," *Times Online*, December 5, 2007, http://www.timesonline.co.uk/tol/news/world/us and americas/article3004070.ece.

¹⁴ Personal communication, Christopher Ford, former U.S. Special Representative for Nuclear

Nonproliferation.

15 This difference is acknowledged by the United States in Department of State, "Adherence to and Compliance with Arms Control, Nonproliferation and Disarmament Agreements and Commitments," p. 67, although the circumstances in which the United States believes that safeguards non-compliance would not constitute article III non-compliance are not elaborated. 16 NPT, Article III.

¹⁷ International Atomic Energy Agency, "The Structure and Content of Agreements Between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons," INFCIRC/153 (Corrected), June 1972,

http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc153.pdf, para. 28. My

¹⁸Acton, "The Problem with Nuclear Mind Reading," pp. 121-126.

19 "Final Document," 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (volume 1), NPT/CONF.2000/28 (Parts I and II), New York, 2000, p. 8, http://www.un.org/disarmament/WMD/Nuclear/2000-NPT/pdf/FD-Part1and2.pdf.

Paul K. Kerr, "Iran's Nuclear Program: Tehran's Compliance with International Obligations," Congressional Research Service, R40094, December 4, 2008,

http://www.fas.org/sgp/crs/nuke/R40094.pdf.

21 Department of State, "Adherence to and Compliance with Arms Control, Nonproliferation

and Disarmament Agreements and Commitment," pp. 72-80.

²² Quoted in full in Mohamed I. Shaker, The Nuclear Non-Proliferation Treaty: Origin and Implementation 1959-1979, vol. 1 (New York: Oceana Publications, 1980), p. 251.

²³ There are few details of the fifth case, Romania, in the public domain.

²⁴ Goldschmidt, "Concrete Steps to Improve the Nonproliferation Regime," p. 18.

²⁵ Of course, any future finding of non-compliance with regard to Iran (related, perhaps, to renewed refusals to facilitate inspector access to Arak) would be covered by these proposals.

¹³ Alexei G. Arbatov, "The Inexorable Momentum of Escalation" in Patrick M. Cronin, ed., Double Trouble: Iran and North Korea as Challenges to International Security (Westport, CT: Praeger, 2007), p. 65.

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