

Interpreting the Nuclear Non-Proliferation Treaty

DANIEL H. JOYNER

OXFORD
UNIVERSITY PRESS

Contents

<i>Table of Cases</i>	xi
<i>Table of Instruments</i>	xiii
Introduction	1
I. Nuclear Energy and International Law	3
I. Nuclear Energy	3
II. International Law	6
II. Approach to Interpretation	21
I. Context and Object and Purpose in Interpretation of the NPT	26
II. Conclusions	33
III. NWS Nuclear Policy and Interpretation of the NPT	35
I. Epochs of Policy toward Nuclear Weapons	35
II. Non-Proliferation	41
III. Peaceful Use	47
IV. Legal Analysis of NWS Interpretations of the NPT	75
I. Non-Proliferation	76
II. Peaceful Use	78
III. Disarmament	95
V. Developments after 2008: Change and Continuity	109
I. 2009	109
II. 2010	113
III. Summary Analysis of Change and Continuity Post-2008	123
<i>Annex I: Treaty on the Non-Proliferation of Nuclear Weapons</i>	127
<i>Annex II: Atoms for Peace</i>	133
<i>Annex III: Selected US Statements 1998–2009</i>	140
<i>Index</i>	179

agenda in this regard are legitimate; action to curb proliferation must be taken in tandem with nuclear disarmament and the use of nuclear technology for exclusively peaceful ends. We reiterate our understanding that disarmament and non-proliferation processes are closely interrelated and mutually reinforcing. A balanced implementation of the NPT with equal focus on these pillars is essential if the present challenges to the mutual undertakings on which the Treaty is based are to be surmounted.¹⁹

Representing the states of the Non-Aligned Movement in his statement to the 2009 PrepCom, the representative from Cuba declared:

NAM calls upon all States Parties, both the nuclear weapon and the non nuclear weapon States, to recognize the importance of the full and non-selective implementation of the three pillars [...] The NPT is a cornerstone of the nuclear non-proliferation and disarmament regime; it protects the world from the colossal damage of a potential nuclear war that would devastate us all. We must relentlessly pursue our aim of universalization of the regime and its total commitment and adherence by all States, while providing equal weight to the three pillars of disarmament, non-proliferation, and the pursuit of lawful nuclear energy sources.²⁰

In their statements to NPT meetings, developing NNWS parties tend to speak of the three principled pillars relatively evenhandedly, and to stress the need to return balance to prioritization of the three pillars in states' nuclear policies, and not to prioritize any one of the pillars over the others. In his statement to the 2005 Review Conference, the representative from Nigeria said:

It is [...] regrettable to note that increasing efforts by some States in the past few years to pursue the objectives of non-proliferation in the use of civilian nuclear reactors may hinder the peaceful application of nuclear technology as provided for in the Treaty. In this connection, we urge State Parties to adopt appropriate measures, at this Review Conference, to preserve the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination as contained in the Treaty [...] The Treaty on Non-Proliferation of Nuclear Weapons rests on three pillars of nuclear non-proliferation, nuclear disarmament and peaceful uses of nuclear energy. All States Parties share a common desire to realize the goals we have set for ourselves in relation to each of the three pillars but in doing so, there is need for caution and transparency to ensure that none of the three objectives is achieved at the expense of the other.²¹

¹⁹ Statement by the Head of the Delegation of Brazil, Ambassador Luiz Felipe de Macedo Soares, to the Second Session of the Preparatory Committee to the 8th Review Conference of the Treaty on the Non-proliferation of Nuclear Weapons, April 28, 2008.

²⁰ Statement by Ambassador Abelardo Moreno, Permanent Representative of Cuba to the United Nations, 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 Third Session of the Preparatory Committee for the 2010 Review Conference of the States Parties to the Treaty on the Non-proliferation of Nuclear Weapons, New York, May 4, 2009.

²¹ Statement by Mr Chuka Udedibia, Minister Permanent Mission of Nigeria to the UN, on Behalf of the Nigerian Delegation. Delivered at the 2005 Review Conference of States Parties to the Treaty on Non-proliferation of Nuclear Weapons, May 3, 2005.

Similarly, the Indonesian representative, again representing the 100+ states of the Non-Aligned Movement, made the following statement to the 2008 PrepCom:

The NAM States Parties regard the three pillars of NPT; nuclear disarmament, non-proliferation, and the peaceful uses of nuclear technology, as vital to an invigorated Treaty that benefits all mankind. We stress that this review cycle should focus equally on the three pillars of the NPT. The lack of balance in the implementation of the NPT threatens to unravel the NPT regime [...]. NAM calls upon all States Parties, NWS and NNWS, to recognize the importance of the full and non-selective implementation of the Treaty in nuclear disarmament, non-proliferation, and the peaceful uses of nuclear technology, which I repeat are the three pillars of the Treaty.²²

These differences of approach to the question of the relative priority to be given to the three principled pillars of the NPT are at their essence differences in the legal interpretation of the NPT as a conventional source of international law, as some of the NWS statements from 2003–2008 were at pains to make clear.

III. Peaceful Use

As compared to references in NWS statements to nuclear non-proliferation issues during the target era, there can be found far fewer references by the same representatives to NNWS rights of peaceful civilian nuclear use, or to the obligation of all states, particularly including NWS and other supplier countries, to assist in these uses, per Article IV of the NPT. Furthermore, on the occasions in which reference is made to issues of nuclear peaceful use, NWS official statements during this period are generally not positive endorsements of the utility and value of existing peaceful nuclear energy programs, nor of the desirability of the spread of such programs in the developing world particularly—principles which were at the heart of President Eisenhower's Atoms for Peace proposal, and which provide the underpinning for the peaceful use pillar of the NPT. Indeed on the contrary, they customarily emphasize the dangers inherent in NNWS pursuit of civilian uses of nuclear energy, and in particular their pursuit of indigenous capabilities for production of fissile materials.

These statements by NWS representatives frequently invoke this danger as the justification for a very narrow and limited view of the rights recognized and obligations created in NPT Article IV. Under this limited view, the rights and obligations of Article IV are clearly and tightly circumscribed by the non-proliferation obligations of Articles II and III. These statements make clear the view that the

²² Statement by H.E. Gusti Agung Wesaka Puja, Ambassador of the Republic of Indonesia, 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 the Non-proliferation of Nuclear Weapons, April 28, 2008.

Article IV rights and obligations are secondary in priority to the non-proliferation obligations of Articles II and III, and are only operative on condition of prior, full, and demonstrated compliance with these normatively superior non-proliferation obligations.

Again, as noted above, one of the clearest statements of the rationale underpinning this marginalization of the peaceful use principles of Article IV is to be found in U.S. President Bush's February 11, 2004 speech in which he characterizes the rights and obligations related to peaceful use in Article IV as a 'loophole' in the treaty—one that has been and will continue to be exploited by certain NNWS to cover their true aims of nuclear proliferation.²³ This negative characterization of the principles of peaceful use codified in Article IV would become a theme running through statements of U.S. representatives to NPT meetings from 2004–2008, and can also be seen reflected in the statements of other NWS during this period as well. It further served as the theoretical underpinning for a number of proposals advanced by NWS during this era, aimed at limiting the access of NNWS to what are considered 'sensitive' civilian nuclear fuel cycle technologies.

Bush's negative characterization of Article IV principles was immediately parroted by U.S. representative John Bolton in his statement to the 2004 PrepCom:

There is a crisis of NPT noncompliance, and the challenge before us is to devise ways to ensure full compliance with the Treaty's non-proliferation objectives. Without such compliance by all members, confidence in the security benefits derived from the NPT will erode. To address this serious problem, President Bush recently announced a series of proposals that are aimed at strengthening compliance with the obligations we all undertook when we signed the Treaty. These proposals will address a fundamental problem that has allowed nations like Iran and North Korea to exploit the benefits of NPT membership to develop their nuclear weapons programs. The President is determined to stop rogue states from gaining nuclear weapons under cover of supposed peaceful nuclear technology. As President Bush said on February 11, 'Proliferators must not be allowed to cynically manipulate the NPT to acquire the material and infrastructure necessary for manufacturing illegal weapons.'²⁴

U.S. representative Stephen Rademaker had a similar message regarding the relationship between the non-proliferation and peaceful use pillars of the NPT in his statement to the 2005 PrepCom:

The NPT is fundamentally a treaty for mutual security. It is clear that the security of all member states depends on unstinting adherence to the Treaty's non-proliferation norms by all other parties [...]. Today, the Treaty is facing the most serious challenge in its history

²³ Remarks by U.S. President George W. Bush on Weapons of Mass Destruction Proliferation, Fort Lesley J. McNair—National Defense University, Washington D.C., February 11, 2004.

²⁴ Statement by United States Under Secretary of State for Arms Control and International Security John R. Bolton, to the Third Session of the Preparatory Committee for the 2005 Review Conference of the Treaty on the Non-proliferation of Nuclear Weapons. 'The NPT: A Crisis of Non-Compliance,' New York, April 27, 2004.

due to instances of noncompliance. Although the vast majority of member states have lived up to their NPT non-proliferation obligations that constitute the Treaty's most important contribution to international peace and security, some have not [...] U.S. support for the NPT extends far beyond our determined efforts to reinforce the Treaty's core non-proliferation norms. The benefits of peaceful nuclear cooperation comprise an important element of the NPT. Through substantial funding and technical cooperation, the United States fully supports peaceful nuclear development in many states, bilaterally and through the IAEA. But the language of Article IV is explicit and unambiguous: states asserting their right to receive the benefits of peaceful nuclear development must be in compliance with their non-proliferation obligations under Articles I and II of the NPT. No state in violation of Articles I or II should receive the benefits of Article IV. All nuclear assistance to such a state, bilaterally or through the IAEA, should cease.²⁵

In his statement to the 2008 PrepCom on behalf of the United States, Christopher Ford similarly pointed out the dangers inherent in the spread of civilian nuclear programs:

First, there is wide international understanding that the proliferation of the capability to produce fissile material usable in nuclear weapons poses grave dangers to the non-proliferation regime. The difficulty in obtaining fissile material is the principal obstacle to developing nuclear weapons, and the unchecked or unsafeguarded acquisition of material-production capabilities by countries with potential nuclear weapons ambitions is antithetical to the cause of non-proliferation.²⁶

However, the United States was not alone during the target era in noting the threat posed by the spread of civilian nuclear programs, and in stressing the limited and circumscribed nature of the Article IV rights and obligations. In his statement to the 2005 RevCon, French representative François Rivasseau emphasized the conditional nature of the Article IV right:

My country will ensure that the right to 'nuclear energy for peaceful purposes' recognized in Article IV of the NPT be preserved and fully exercised for countries that unambiguously comply with their international obligations [...]. I wish to recall in this respect the conditions required to have the right to nuclear power within the meaning of Article IV of the Treaty, namely: compliance with the obligations to ensure non-proliferation and implement IAEA safeguards on the one hand; and the pursuit of 'peaceful purposes' on the other in accordance with the principle of good faith. It is evident that a State failing to comply with its obligations to ensure non-proliferation and implement IAEA safeguards and the peaceful purposes of whose nuclear activities could not be recognized, would not be entitled to enjoy the stipulations of Article IV.²⁷

²⁵ Statement by Stephen G. Rademaker, United States Assistant Secretary of State for Arms Control, to the 2005 Conference of the Treaty on the Non-proliferation of Nuclear Weapons, New York, May 2, 2005.

²⁶ See 'A Recipe for Success at the 2010 Review Conference,' Dr Christopher A. Ford, United States Special Representative for Nuclear Non-proliferation, Opening Remarks to the 2008 NPT Preparatory Committee, Palais des Nations, Geneva, Switzerland, April 28, 2008.

²⁷ Statement to the 2005 Review Conference of the Parties to the Treaty on the Non-proliferation of Nuclear Weapons, May 5, 2005.

In the same vein, in his statement to the 2008 PrepCom, French representative Jean-François Döbelle remarked:

My country fully supports the inalienable right recognized for parties to the Treaty to develop nuclear energy for peaceful purposes, but it recalls that according to the provisions of Article IV, that right is not unconditional. Indeed, under the terms of the Treaty, such entitlement is subject to the following conditions:

- Firstly, conformity with the non-proliferation obligations laid down in Articles I and II of the Treaty, and acceptance of the IAEA safeguards as defined in Article III;
- Secondly, the pursuit, in accordance with the principle of good faith, of 'peaceful purposes'.

Indeed, the right to peaceful use must not be diverted to allow the use of nuclear materials, equipment and technology for purposes contrary to the intentions of the Treaty. No State failing to meet its obligations with regard to non-proliferation and the application of IAEA safeguards, or whose nuclear activities are not directed toward identifiable peaceful ends, can claim the benefit of the stipulations contained in Article IV [...] we must promote mutual understanding of the conditions to be met for the exercise of the right to make peaceful use of atomic energy, a right that must be enjoyed by as many States as possible insofar as they abide by their non-proliferation obligations and pursue in good faith activities directed at peaceful goals.²⁸

Also in 2008, in his statement to the PrepCom on behalf of Russia, Anatoly Antonov made the following observation particularly with regard to the maintenance and spread of indigenous enrichment capabilities by developing states:

We can see today that countries are increasingly interested in developing nuclear energy as a reliable resource ensuring their energy security. This is a natural process. It gives ample opportunities for international cooperation. First of all, those should be taken to supply countries developing their own atomic energy with nuclear fuel in a reliable and assured manner. One way is that every country can establish its own facilities to enrich uranium, produce fuel and further reprocess it. Yet, it is a very complicated process not only in terms of funds, but also in terms of intellectual, scientific, physical and technical resources. Is moving along this path justified when the world market is capable of meeting both current and future needs in this area? It is unlikely so.²⁹

And in their joint statement to the 2008 PrepCom, following their recitation of recognition of the Article IV right to peaceful use, the five NWS made sure to emphasize the limited and conditional nature of that right, and to discourage the maintenance and spread of indigenous fuel cycle programs in NNWS:

²⁸ Statement by H.E. Ambassador Jean-François Döbelle, Permanent Representative of France to the Conference on Disarmament, Head of the French Delegation, to the Second Session of the Preparatory Committee for the 2010 NPT Review Conference, April 28, 2008.

²⁹ Statement by H.E. Ambassador Anatoly Antonov, Head of the Delegation of the Russian Federation at the Second Session of the Preparatory Committee for the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, April 28, 2008.

We note that a growing number of States Party is showing interest in developing nuclear programmes aimed at addressing their long-term energy requirements and other peaceful purposes. We are ready to co-operate with States Party in the development of nuclear energy for peaceful uses and we emphasise the requirement for compliance with non-proliferation obligations and for development of research, use and production of nuclear energy to be solely for peaceful purposes. We believe such international co-operation should contribute to the full implementation of the NPT and enhance the authority and effectiveness of the global non-proliferation regime.

We welcome the work of the International Atomic Energy Agency on multilateral approaches to the nuclear fuel cycle and encourage efforts towards a multilateral mechanism to assure access for all countries to nuclear fuel services as a viable alternative to the indigenous development of enrichment and reprocessing.³⁰

A. NWS peaceful use policies

This negative and limited view of the peaceful use pillar of the NPT is reflected in a number of proposals and high-level efforts by NWS during the target decade aimed at circumscribing and conditioning the right of NNWS to nuclear fuel cycle technologies, and at changing the conditions under which supplies of nuclear technologies are made to NNWS by NWS and other supplier states. These proposals and efforts include:

1. Requiring NNWS to exclusively source nuclear material from a multilateral fuel bank as a condition of supply;
 2. Requiring NNWS accession to the IAEA Additional Protocol as a condition of supply; and
 3. Conditioning supply and recognition of rights to nuclear technologies on compliance with an IAEA Comprehensive Safeguards Agreement.
- I will proceed to consider each of these in turn.

1. The NSG

In order to discuss and evaluate these proposals and efforts, however, a preliminary discussion of the Nuclear Suppliers Group (NSG) is necessary. I will only include herein a summary description and discussion of the NSG. For a more detailed discussion of the NSG's history and functioning, please see, *inter alia*, my previously published work.³¹

³⁰ Statement on behalf of China, France, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, to the 2008 Non-Proliferation Treaty Preparatory Committee, delivered by Ambassador John Duncan, UK Ambassador for Multilateral Arms Control and Disarmament, May 9, 2008.

³¹ See generally Daniel H. Joyner, 'The Nuclear Suppliers Group: History and Functioning,' 11(2) *International Trade Law & Regulation* (2005) 33-42; *ibid.* 'The Nuclear Suppliers Group: Present Challenges and Future Prospects,' 11(3) *International Trade Law & Regulation* (2005) 84-96.

Article III.2 of the NPT provides the international legal basis for all nuclear export controls. It specifies that all parties to the treaty will not transfer nuclear (fissionable) materials, as well as 'any equipment or material especially designed or prepared for the processing, use or production of special fissionable material' to non-nuclear weapon states for peaceful purposes unless such material is subject to the IAEA safeguards specified in Article III.1.³²

This provision, providing only the most vague of standards both on the subject of criteria for applying national export controls, and on the question of exactly what materials should be the subject of national export controls, created an urgent need for clarification of the NPT's meaning in this regard. This was particularly the case as the regulation of trade in nuclear-related technologies between states formed the most practical continuing concern for states in possession of such technologies, and the issue area in which the implementation of NPT rules was to be most impactful upon the national laws and policies of the NWS and other supplier states of nuclear-related technologies.

Due to this need, in March 1971, shortly after the NPT's entry into force, a group of nuclear supplier states gathered for the purpose of clarifying the technical implications of NPT export controls, as well as to establish a continuing forum for interpretation of Article III.2's broad export control provisions. This meeting was the nucleus of a group which came to be known as the Zanger Committee, after its first Chairman, Professor Claude Zanger.

The Zanger Committee continued to meet periodically and eventually established both a set of Understandings adopted by all Committee members, and a trigger list composed of items the export of which should 'trigger' the requirement of safeguards. The Zanger Committee's Understandings were published in September 1974 as IAEA document INFCIRC/209, and are divided into two separate memoranda addressing export controls on a category of items described in Article III.2. Memorandum A covers source and special fissionable material, and Memorandum B covers equipment and material specifically designed or prepared for the processing, use, or production of special fissionable material. The memoranda provide that nuclear suppliers should, in the context of a transfer of subject items to a non-nuclear weapon state not party to the NPT,

- (a) obtain assurances from the recipient state that the exported materials will not be used in a nuclear explosion;
- (b) subject such items, and materials on the trigger list produced through their use, to IAEA safeguards; and
- (c) ensure that items on the trigger list are not re-exported to a third party recipient state unless that recipient state meets the criteria laid out in (a) and (b).

3. NWS Nuclear Policy and Interpretation of the NPT

53

The trigger list, which clarifies and provides detail regarding the equipment listed in the memoranda, is updated regularly in accordance with technological innovations. The Zanger Committee's trigger list and memoranda together comprised the first major agreement among supplier states regarding nuclear export controls.

The explosion of a nuclear device by India in May 1974, in addition to increased activity among other NNWS to create a full nuclear fuel cycle, led to heightened concern among supplier states regarding nuclear proliferation. In 1975 a new group of supplier states met in London with the purpose of supplementing the Zanger Committee's work in the field of nuclear export controls. Over successive meetings, this group became known unofficially as the 'London Club,' and officially as the Nuclear Suppliers Group (NSG). The NSG's chief distinction from the Zanger Committee was initially to be found in the character of its membership. The Zanger Committee had from its inception been comprised exclusively of NPT member states. The NSG by contrast was consciously envisioned to include non-parties to the NPT and, importantly, France, a major supplier state not yet a party to the NPT and therefore also not a member of the Zanger Committee. The establishment of the NSG thus expanded the number of important voices and interests in deliberations regarding nuclear export control standards.³³

In 1976 NSG member states produced a document entitled 'Guidelines on Nuclear Transfers,' which was accepted by all fifteen members in 1977 and published in February 1978 as IAEA document INFCIRC/254. The NSG guidelines incorporated the Zanger Committee trigger list and largely mirrored the Zanger Committee's Understandings, with the notable addition of going beyond the context of the NPT to cover nuclear transfers to any non-nuclear weapon state. The NSG guidelines further tightened export control standards in a number of areas including in the transfer of nuclear facilities and technology supporting them.

Following the adoption of the guidelines in 1977, the NSG did not meet again officially for thirteen years, although during this time the NSG Guidelines were implemented by member states through national measures and twelve more states from both the West and the East formally accepted the Guidelines. However, the NSG entered a period of renewed activity beginning with the end of the Cold War—a revival which was largely spurred by the experience of the 1990–91 Gulf War and the revelations of Iraq's mature, and clandestine, WMD development programs.

These revelations brought home to supplier states in compelling fashion the necessity of greater attention to harmonization and tightening of multilateral nuclear export controls in general. This was particularly perceived as it became clear that items and technologies used exclusively in the processes of weapons

³³ See Tadeusz Strulak, 'The Nuclear Suppliers Group,' 1(1) *The Non-proliferation Review* (Fall 1993).

³² See *ibid.*

manufacture were not the only or even the most important problem for export control systems to deal with. As the war progressed, and particularly in its aftermath, it became clear that one of the greatest facilitators of the formidable Iraqi nuclear weapons program was the importation, through various methods ranging from open purchase to covert indirect acquisition, of items from Western companies which were not exclusively used in the production of fissile materials and other elements of a nuclear weapons program, but which were rather dual-use in nature, again items which had legitimate civilian uses but which could also be adapted for use in weapons programs.³⁴

The trigger lists and foundational principles both of the Zangger Committee and the NSG had up to that point been concentrated on fissile materials and those items and technologies 'especially designed' for their production, as specified in Article III.2 of the NPT. Now, however, it was realized that a sizeable 'dual-use gap' existed as between the normative foundations of the multilateral nuclear export control regimes and the realities of the modern security environment. The recognition of this dual-use gap, and a commonly perceived imperative to narrow it, contributed significantly to the revival of the NSG.³⁵

At the NSG plenary meeting in the Hague in March 1991, the members agreed to bring the NSG control list up to date by broadening it to include the items which had been added to the Zangger Committee's control list since the last NSG meeting in 1977. However, the most noteworthy achievement of the Hague meeting was the decision to create a supplementary regime within the NSG framework to control exports of nuclear-related dual-use materials and technology. This arrangement was formally adopted by the twenty-seven NSG members at the 1992 plenary meeting in Warsaw, and both the resulting guidelines and trigger list were published by the IAEA in July 2002 as INFCIRC/254/REV 1, Part 2.

The NSG arrangement for dual-use nuclear export controls, now referred to as NSG Part 2, consists of a set of guidelines for transfers of nuclear dual-use items and a list of approximately sixty-five items including equipment and technology. The 'Basic Principle' of the guidelines states that suppliers should not authorize transfers of equipment, materials, software, or related technology identified on the list if (1) they are to be used by a non-nuclear-weapon state in a nuclear explosive activity or an unsafeguarded nuclear fuel cycle; (2) there is in general an unacceptable risk of diversion to such an activity; or (3) the transfers are contrary to the objective of averting the proliferation of nuclear weapons.

When considering the role of the NSG as a normative regime, and its influence upon the actions of its participants, it is important to bear a number of

³⁴ James Holmes and Gary Bertsch, 'Tighten Export Controls,' *Defense News*, May 5, 2003. David Albright and Mark Hibbs, 'Iraq and the Bomb, Were They Even Close?' *The Bulletin of Atomic Scientists* (April 1992) 16–28; David A. Kay, 'Denial and Deception of WMD Proliferators,' 18(1) *The Washington Quarterly* (November 1994) 90.

³⁵ See Carlton E. Thorne, ed., *A Guide to Nuclear Export Controls* (5th edn, 2002).

points in mind. The first is that the guidelines and the trigger lists of the NSG are not formally binding legal documents. 'Membership' in the NSG (or 'participation' as is the favored phrase of the Group) is accomplished through a joint, informal declaration of adherence to the guidelines. Second, the NSG is not, strictly speaking, a multilateral normative regime, if by multilateral one means an institution or regime in which any state may be included according to its own will. Rather, the NSG, like all the other international export control regimes (e.g. the Australia Group, the Missile Technology Control Regime, and the Wassenaar Arrangement) is technically speaking a plurilateral regime, in which membership is only extended to states on the basis of the consensual vote of the existing group of participants, currently numbering forty-five. It is this plurilateral aspect of the institutional character of the NSG, along with its track record which many developing countries perceive as being unduly restrictive toward states legitimately attempting to develop civilian power generation facilities, which has led many NNSWS to criticize the NSG as constituting a supplier state 'cartel'.³⁶

Notwithstanding their legal informality and these criticisms by developing states, the NSG guidelines and trigger list do have a significant influence upon the policies of its participating states, and the implementation of NSG standards in the national law of participants is expected by their fellows in the Group, among other reasons in order to prevent the collective action problem of undercutting.³⁷

This, then, is the context for understanding the proposals, first made by U.S. President Bush in his February 2004 speech, for amending the NSG Guidelines on Nuclear Transfers in order to more stringently limit trade in both single use and dual-use nuclear technologies to NNSWS developing states. Immediately after characterizing the Article IV NPT right to nuclear energy development as a 'loophole' in the treaty, Bush continued as follows:

So today, as a fourth step, I propose a way to close the loophole. The world must create a safe, orderly system to field civilian nuclear plants without adding to the danger of weapons proliferation. The world's leading nuclear exporters should ensure that states have reliable access at reasonable cost to fuel for civilian reactors, so long as those states renounce

³⁶ See, e.g., NAM Summit Declaration, Cartagena, Colombia, 18–20 Oct. 1995. Available at <http://www.nam.gov.za/xisummit/index.html>. In this Declaration, NAM members 'noted with concern the growing restraint placed on access to material, equipment and technology for peaceful uses of nuclear energy by the developed countries through imposition of ad-hoc export control regimes.'

³⁷ Paragraph 4(b) of the 1992 dual-use regime Memorandum of Understanding states that member governments 'should not authorize a transfer of equipment, materials, software, or related technology identified in the Annex which is essentially identical to a transfer which was not authorized by another Subscribing Government where this decision was notified pursuant to subparagraph (a), without consulting the Subscribing Government which provided the notice.' The observance of this rule on undercutting transfers is vital to the maintenance of an effective procedure for information sharing in the area of denial notifications. This principle and the other implementing principles of the MOU for 'leveling the playing field' among members became available for acceptance by all NSG members in 1997.

enrichment and reprocessing. Enrichment and reprocessing are not necessary for nations seeking to harness nuclear energy for peaceful purposes.

The 40 nations of the Nuclear Suppliers Group should refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants. This step will prevent new states from developing the means to produce fissile material for nuclear bombs. Proliferators must not be allowed to cynically manipulate the NPT to acquire the material and infrastructure necessary for manufacturing illegal weapons.

For international norms to be effective, they must be enforced. It is the charge of the International Atomic Energy Agency to uncover banned nuclear activity around the world and report those violations to the U.N. Security Council. We must ensure that the IAEA has all the tools it needs to fulfill its essential mandate. America and other nations support what is called the Additional Protocol, which requires states to declare a broad range of nuclear activities and facilities, and allow the IAEA to inspect those facilities.

As a fifth step, I propose that by next year, only states that have signed the Additional Protocol be allowed to import equipment for their civilian nuclear programs. Nations that are serious about fighting proliferation will approve and implement the Additional Protocol.³⁸

I will proceed to examine these two proposals, before moving on to consider efforts to limit NNWS' Article IV rights by reference to Article III and compliance with IAEA safeguards agreements.

2. Fuel bank membership as a condition of supply

The first of Bush's proposals was in essence a proposal for a change to the NSG guidelines in order to cut off supplies of nuclear fuel and technology from supplier states to all NNWS that maintain domestic enrichment and reprocessing capabilities. He further proposed that no state that does not already have enrichment and reprocessing facilities should be provided materials and technologies for developing such facilities by NSG participants. Instead, Bush proposed that, for states that do renounce their rights to maintain domestic enrichment and reprocessing capabilities, [t]he world's leading nuclear exporters should ensure that [they] have reliable access at reasonable cost to fuel for civilian reactors.³⁹ In later comments by U.S. as well as other NWS officials, it became clear that this proposal translated into an initiative to change NSG guidelines in order to make membership in an international fuel bank facility a condition of supply of nuclear fuel and other technologies.

Bush's proposal clearly drew inspiration from analysis and proposals made by IAEA Director-General Mohamed ElBaradei in 2003 in an op-ed published in the *Economist* magazine. In the op-ed, ElBaradei explained:

Uranium enrichment is sophisticated and expensive, but it is not proscribed under the NPT. Most designs for civilian nuclear-power reactors require fuel that has been 'low-enriched', and many research reactors operate with 'high-enriched' uranium. It is not uncommon, therefore, for non-nuclear-weapon states with developed nuclear infrastruc-

tures to seek enrichment capabilities and to possess sizeable amounts of uranium that could, if desired, be enriched to weapons-grade [...]. Under the current regime, therefore, there is nothing illicit in a non-nuclear-weapon state having enrichment or reprocessing technology, or possessing weapon-grade nuclear material. And certain types of bomb-making expertise, unfortunately, are readily available in the open literature. Should a state with a fully developed fuel-cycle capability decide, for whatever reason, to break away from its non-proliferation commitments, most experts believe it could produce a nuclear weapon within a matter of months [...]. The margin of security under the current non-proliferation regime is becoming too slim for comfort. We need a new approach.

My proposal has three parts: First, it is time to limit the processing of weapon-usable material (separated plutonium and high-enriched uranium) in civilian nuclear programmes, as well as the production of new material through reprocessing and enrichment, by agreeing to restrict these operations exclusively to facilities under multinational control. These limitations would need to be accompanied by proper rules of transparency and, above all, by an assurance that legitimate would-be users could get their supplies.⁴⁰

The basic idea of the international fuel bank facilities envisioned by both ElBaradei and Bush is not new. Indeed, it harkens back to the proposal by U.S. representative Bernard Baruch in 1946 to establish an International Atomic Development Authority, as well as to the original conception of the International Atomic Energy Agency expressed by President Eisenhower in his Atoms for Peace proposal in 1953. The idea of a repository of fissile material procured from supplier states, under some form of collective international control, and to be used for the purpose of supplying developing countries with nuclear fuel for civilian energy production, underpins all of these proposals. NWS officials in the Bush era simply revived this old idea in their proposals. However, what they added to the fuel bank concept is the proposal that such internationally controlled fuel banks, combined with a limited number of multinational enrichment centers, be the exclusive source of supply of nuclear fuel for developing NNWS parties to the NPT; an exclusivity encompassing the requirement of renunciation of NNWS rights to maintain indigenous enrichment and reprocessing capabilities. These proposals further include the idea that the NSG guidelines should be amended to require such exclusive sourcing of nuclear fuel as a condition of supply of other nuclear-related technologies, including dual-use technologies.

Since Bush's 2004 address, proposals for exclusive sourcing of NNWS nuclear fuel from international fuel banks, and multinational enrichment centers, as well as the idea of fuel bank membership as an NSG condition of supply, have been adopted and advocated by a number of other NWS governments. Russia, in particular, has expressed its endorsement of such proposals:

⁴⁰ 'Towards a Safer World,' *The Economist*, October 16, 2003. See the development of these ideas in a report published by an IAEA expert group at INFIRC/640, dated February 2005; Tariq Rauf and Zorjiana Vovchok, 'Fuel For Thought,' *IAEA Bulletin* 49(2) (March 2008) 59–63 ('The vision of a new framework is that all new enrichment and reprocessing should be exclusively under multinational control and eventually all such sensitive nuclear fuel cycle technologies are operated multilaterally with an assurance of supply mechanism.')

³⁸ Remarks by U.S. President George W. Bush on Weapons of Mass Destruction Proliferation, Fort Lesley J. McNair—National Defense University, Washington D.C., February 11, 2004.

³⁹ *Ibid.*

on a number of occasions. For example, in his statement to the 2008 PrepCom, Russian Representative Anatoly Antonov noted:

Today countries are increasingly interested in developing nuclear energy as a reliable resource ensuring their energy security [. . .] One can often hear that a country cannot completely depend on the situation in the market or on the political will of some States. These are legitimate concerns. We think they can be allayed on the basis of multilateral approaches to the nuclear fuel cycle, intended to provide an economically reasonable and feasible alternative to establishing all its elements at a national level [. . .] The former Russian President, Vladimir Putin, suggested we work together to develop global nuclear energy infrastructure and to set up multinational centers to provide nuclear fuel cycle services. Our first step was to establish the International Uranium Enrichment Center on the basis of the enrichment plant in Angarsk. Kazakhstan takes part in it, with Armenia finalizing its accession procedures. Those participating in the Center will have a guaranteed access to enrichment services to meet their nuclear fuel needs without developing their own production facilities.⁴¹

In furtherance of these initiatives regarding international fuel banks, a number of specific proposals have been developed for fuel bank and other fuel cycle facilities. At least twelve such proposals have been produced—some by individual states, such as Russia's Global Nuclear Infrastructure Initiative to be headquartered at Angarsk, and the United States' Global Nuclear Energy Partnership; some by coalitions of states, such as the Six Country Concept (Reliable Access to Nuclear Fuel) presented by France, Germany, Russia, the Netherlands, the U.K., and the U.S.; and at least one by a non-governmental organization—the Nuclear Threat Initiative Proposal to be administered by the IAEA.⁴² These proposals at least originally all shared in the essentials of the fuel bank concept described above. However, some have gone further and would additionally potentially provide independent enrichment and fuel return and reprocessing services. Almost all have conceived, or yet conceive of their services, along with those of multinational enrichment centers as being the exclusive source of nuclear fuel for recipients.⁴³

Reception of such proposals by developing NNWS—the potential recipients of such international fuel sourcing services—has been largely negative.⁴⁴ Many

⁴¹ Statement by H.E. Ambassador Anatoly Antonov, Head of the Delegation of the Russian Federation at the Second Session of the Preparatory Committee for the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, April 28, 2008.

⁴² See generally Tariq Rauf and Zoryana Vovchok, 'Twelve Proposals on the Table,' 49(2) *IAEA Bulletin* (March 2008); Fiona Simpson, 'Reforming the Nuclear Fuel Cycle: Time is Running Out,' 38(7) *Arms Control Today* (September 2008); 'EU Pledges Funds for IAEA Fuel Bank,' 39(1) *Arms Control Today* (February 2009).

⁴³ The only proposal which has not required exclusivity is the German Multilateral Enrichment Sanctuary Project (MESP).

⁴⁴ See Statement by the Delegation of the Republic of Indonesia on behalf of the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, at the Second Session of the Preparatory Committee for the 2010 Review Conference of the States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, April 28–May 9, 2008. On Cluster 3 Issues,

have expressed concerns that exclusive sourcing of nuclear fuel from fuel banks and other foreign-controlled sources would unacceptably circumscribe their rights under Article IV of the NPT. Indeed, at the IAEA Board of Governors' meeting on June 18, 2009, the Board blocked a proposal by IAEA Director-General Mohamed ElBaradei to move forward on the Agency's plans to establish and administer a fuel bank, in potential partnership with a number of both private and public investors. As reported by Reuters:

While developing states agreed to let talks go on, they warned others on the IAEA's 35-nation governing board against 'attempts meant to discourage the pursuit of any peaceful nuclear technology on grounds of its alleged "sensitivity" [. . .] [D]eveloping nation' delegations kept saying they felt this plan would hamper their inalienable and sovereign right under the Non-Proliferation Treaty to develop their own nuclear fuel cycle,' said a Vienna diplomat in the closed-door gathering.⁴⁵

As Patricia Lewis has written:

The various proposals for multinational approaches to the nuclear fuel cycle and assurance of supply are having a difficult time gaining traction in the developing world. There are persistent fears that the nuclear supplier countries are plotting price-fixing cartels and that they have a long term aim of infringing on Article 4 rights.⁴⁶

Even as rhetoric regarding the exclusive-sourcing aspect of multilateral fuel banks seems to have been dropped by at least the U.S. government since Barack Obama assumed the U.S. presidency in 2009, as will be more fully discussed below, many NNWS are still dubious of the fuel banks because of their conceptual provenance,

('The [NAM] Group rejects, in principle, any attempts aimed at discouraging certain peaceful nuclear activities on the ground of their alleged "sensitivity." Concerns related to nuclear non-proliferation shall not in any way restrict the inalienable right of all states to develop all aspects of nuclear science and technology for peaceful purposes.'). Statement by H.E. Ambassador Maged Abdel Fatah Abdel Aziz, Permanent Representative of the Arab Republic of Egypt, before the Third Session of the Preparatory Committee to the 2010 NPT Review Conference, May 4, 2009. ('Egypt notes with growing concern attempts by some to reinterpret Article IV of the Treaty in a manner that aims to restrict the ability of non-nuclear weapon states to benefit from their rights by creating artificial categories of "sensitive" and "non-sensitive" nuclear technologies or "responsible" and "irresponsible" states. Egypt also views with concern efforts by the Nuclear Suppliers Group and other discriminatory arrangements to impose additional restrictions on some but not on others, in a manner that is clearly politicized and does not contribute to the implementation of the NPT's objectives, in particular its universality, as well as interference in the internal affairs of states by attempting to influence the determination of their nuclear energy requirements or to restrict their choice to achieve self-sufficiency in the area of fuel supply.') See also Leonard Weiss, 'Reliable Energy Supply and Non-proliferation,' 16(2) *Non-proliferation Review* (July 2009) 269, 274 ('Outright denial of transfers of fuel cycle technology to non-nuclear weapon states have also become the norm for nuclear suppliers, leading to complaints that one of the grand bargains upon which the NPT was founded has been reneged on,' p. 280).

⁴⁵ Sylvia Westall, 'Obama-backed Nuclear Fuel Bank Plan Stalls at IAEA,' Reuters, June 18, 2009. Available at <<http://www.reuters.com/article/worldNews/idUSTRE55H58120090618>>.

⁴⁶ 'Prospects for the NPT and the 2010 Review Conference,' 40(2) *Arms Control Today* (March 2010) 19.

and the fear that they are a first step toward circumscription of NNWS rights of indigenous control over the nuclear fuel cycle.

3. IAEA Additional Protocol membership as a condition of supply

The second of Bush's proposals was for a change to the NSG guidelines to require NNWS accession to the IAEA Additional Protocol as a condition of supply of nuclear fuel and technologies. As in the case of the proposal for international fuel sourcing of nuclear fuel as a condition of supply, Bush's proposal regarding the IAEA Additional Protocol has since been advocated by a number of other NNWS as well. In his statement to the 2005 RevCon, U.K. representative John Freeman said:

Mr President, these examples should cause us to examine the tools we have at our disposal to counter the challenges they pose. Here I must first mention the IAEA whose work the UK supports in all areas. We believe its work underpins the NPT and stands in the front line against those who would evade or deny their international obligations. We therefore call on all Non-Nuclear Weapon States that have not yet done so to agree, bring into force and comply with, Comprehensive Safeguards Agreements and Additional Protocols to those agreements. We would like to see the combinations of a Comprehensive Safeguards Agreement and Additional Protocol accepted as a future condition of supply for sensitive nuclear materials.⁴⁷

Similarly, in his statement to the 2008 PrepCom, Russian representative Anatoly Antonov said:

Improving the efficiency of IAEA's verification activities is an important aspect of strengthening the nuclear non-proliferation regime. We believe that the Additional Protocol to the Safeguards Agreement is an efficient instrument to provide more opportunities to the Agency in this area. Its application allows to timely prevent and eliminate emerging non-proliferation concerns. In the future, the Additional Protocol should become a universally accepted standard to verify the compliance of States with their NPT non-proliferation obligations and an essential new standard in the field of nuclear supply arrangements.⁴⁸

In order to understand this proposal and its implications, a brief review of the role and work of the IAEA, including the Additional Protocol, is needed. Pursuant to NPT Article III.4, all NNWS parties to the NPT must conclude a safeguards agreement with the IAEA 'for the exclusive purpose of verification of the fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.'⁴⁹ In 1972, two years after the coming into force of the NPT,

⁴⁷ Statement by Ambassador John Freeman, Head of UK Delegation, to the Seventh Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons, New York, May 5, 2005.

⁴⁸ Statement by H.E. Ambassador Anatoly Antonov, Head of the Delegation of the Russian Federation at the Second Session of the Preparatory Committee for the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, April 28, 2008.

⁴⁹ Quote from NPT Article III.1.

the new comprehensive IAEA safeguards system was brought online and defined in document INFCIRC/153, entitled '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 sets out the principles which should be included in a safeguards agreement between the IAEA and each NNWS. The basic system established by INFCIRC/153 is one in which states have an obligation to keep detailed records 'on all source or special fissionable material in all peaceful nuclear activities,' and to provide the IAEA with design information on facilities in which such materials are kept, as well as access to such facilities for IAEA inspectors.⁵⁰

The IAEA's role is essentially one of verification of the details on the location and handling of nuclear materials provided to the Agency through national reporting. In order to fulfill this role, the IAEA is to engage in routine inspections of declared facilities, including sampling of the environment within and outside of such facilities. However, the INFCIRC/153 system was constructed to impose the minimum burden necessary upon NNWS, and to be applied in a manner designed 'to avoid hampering' technological development, 'to avoid undue interference' in civilian nuclear energy, and 'to reduce to a minimum the possible inconvenience and disturbance to the State.' Thus, as one result, IAEA inspectors are not granted rights of access to all parts of safeguarded facilities, but only to agreed 'strategic points' within facilities.⁵¹

INFCIRC/153 does provide, in Article 77, for the IAEA to be granted authority in safeguards agreements to conduct 'special inspections' in addition to these routine inspections, through which the Agency might 'obtain access in agreement with the State to information or locations in addition to the access specified in paragraph 76 above for *ad hoc* and routine inspections.' However, the idea of special inspections was met with considerable opposition from NNWS, and the system which evolved in practice over the next two decades created an environment in which IAEA inspectors did not feel able to make such requests, and in fact did not make them. Thus, the IAEA's role remained one of verification of national reports through routine inspections of declared facilities.

Despite its shortcomings in practice, due to the comprehensive character of the INFCIRC/153 system which is to cover all sites involved in nuclear fuel cycle activity within a state, this safeguards system came to be referred to as the 'Full Scope Safeguards System' (FSSG).⁵²

In the aftermath of the 1991 Iraq war, IAEA inspectors returning to Iraq discovered that the Hussein regime had pursued a nuclear weapons program to an advanced stage, involving activities in facilities located all over the country. This program, according to IAEA Deputy Director of Inspections David Kay, had

⁵⁰ See *ibid.* ⁵¹ See *ibid.*

⁵² See Fritz Schmidt, 'NPT Export Controls and the Zangger Committee,' 7(3) *Non-proliferation Review*, CNS, (Fall–Winter 2000).

progressed to being within 12 to 18 months of acquiring sufficient fissile material to construct a nuclear explosive device.⁵³

This revelation of a large-scale clandestine nuclear weapons program in a state which had signed an INFCIRC/153 agreement with the IAEA, and which was under active Agency safeguards, was troubling. Even more disturbing was the fact that one of the undeclared nuclear installations, the Tuwaitha Nuclear Research Center, was virtually next door to a declared, safeguarded research reactor. Iraq's ability to conceal such an advanced program literally under the noses of IAEA inspectors shook international confidence in the INFCIRC/153 safeguards system.⁵⁴

Again, that system relies almost entirely upon the declarations of facilities and materials made by states, and the IAEA's role under that system is to review those declarations and accounts to verify that the numbers add up, and that all fissile material is accounted for. However, under the INFCIRC/153 system the IAEA had almost no facility for determining the completeness of such reports, or of detecting undeclared nuclear activities.

Speaking at the 46th Session of the General Assembly in 1991, IAEA Director General Hans Blix called for the construction of an IAEA safeguards system with 'more teeth.' Soon afterward, a committee of IAEA member states began negotiation on a protocol to strengthen and supplement the INFCIRC/153 system. This process led to the adoption by the IAEA Board of Governors in 1997 of the Model Additional Protocol (INFCIRC/540).

The Additional Protocol has been characterized as 'an effort to transform IAEA inspectors from accountants to detectives.'⁵⁵ It attempts to do this by supplementing the INFCIRC/153 safeguards system in two primary areas. First, the Additional Protocol requires states to produce a more expanded declaration regarding nuclear fuel cycle activity being carried out within its territory than that required by the INFCIRC/153 system. This expanded declaration is to include details on nuclear materials and the facilities involved in producing, processing, and utilizing them, as required under INFCIRC/153, but in addition must also include information on all nuclear fuel cycle-related research and development activities that do not themselves involve nuclear materials, but which may be used in the production of nuclear materials, including activities being carried out in privately owned facilities. This expansion of information required from the states significantly widens the Agency's understanding of the full range of nuclear-related activities being carried on within a state. This more complete

⁵³ U.S. Senate, Committee on Foreign Relations, *Nuclear Proliferation: Learning from the Iraq Experience*, Hearing before the Committee on Foreign Relations, 102 Cong., 1st Sess., October 17, 1991, p. 20.

⁵⁴ Theodore Hirsch, 'The IAEA Additional Protocol: What it is and Why it Matters,' *The Non-proliferation Review* (Fall–Winter 2004).

⁵⁵ See *ibid.* at 143.

understanding allows the IAEA to better assess the purpose and direction of nuclear programs within NNWS.⁵⁶

Second, the Additional Protocol provides for the IAEA to have 'complementary access' to that which it enjoys under the INFCIRC/153 system. INFCIRC/540 gives the IAEA the right of access 'on a selective basis in order to assure the absence of undeclared nuclear material' to 'any place' on the site of a declared facility, and not only to agreed strategic points, as under the INFCIRC/153 system. It further provides for IAEA access to all sites on which information has been provided by the state regarding research and development activities on nuclear fuel cycle-related technologies, in order 'to resolve a question relating to the correctness and completeness of the information provided.'⁵⁷

Additionally, INFCIRC/540 provides for IAEA access to 'any location specified by the Agency' in order to carry out 'location-specific environmental monitoring.' This provision enables IAEA inspectors to nominate undeclared locations at which they would like to take soil, water, and air samples in order to detect the presence of fissile materials, and thus potentially produce evidence of undeclared nuclear activities.

The notice requirements for the carrying out of inspections under the Additional Protocol are significantly shortened from their length under the INFCIRC/153 system, and are typically set at 24 hours, down from the normal one-week notice period under INFCIRC/153. The Additional Protocol further requires the state to grant multi-entry visas to inspectors. Under the INFCIRC/153 system, this was not a requirement, and the necessity in many states of inspectors obtaining entry visas, often a month-long process, served to give the state even earlier warning of impending inspections.

These supplements to the information-gathering ability of the IAEA, as well as its ability to conduct inspections in a more efficient and effective manner, are significant improvements to the Agency's ability to verify not only the correctness, but also the completeness of state declarations. They allow for increased confidence in the determinations of the IAEA that no undeclared nuclear-related activity is being carried out in a safeguarded territory.

The INFCIRC/540 Additional Protocol is voluntary for NPT member states, in that conclusion of an INFCIRC/540 agreement is not considered a part of the fundamental NNWS safeguards obligation contained in Article III.4 of the NPT. NPT NNWS may, if they choose, maintain only the standard INFCIRC/153 agreement with the IAEA. However, since its adoption in 1997, INFCIRC/540 agreements have been signed and have come into force in eighty-six IAEA member states.

Thus, in summary, the proposals by the several NWS states noted above would change the guidelines of the NSG to make accession to an Additional

⁵⁶ See *ibid.* at 143–144.

⁵⁷ See *ibid.*

Protocol agreement with the IAEA—a voluntarily undertaken obligation granting the IAEA enhanced rights of information gathering and inspection—a condition of supply of nuclear fuel and other technologies for developing NNWS.

4. *Conditioning supply and recognition of Article IV rights on compliance with an IAEA Comprehensive Safeguards Agreement*

On the above-mentioned list of proposals and efforts by NWS during the target era aimed at circumscribing and conditioning the rights of NNWS and the obligation of supplier states under Article IV, the third entry is efforts by NWS to condition nuclear supply and recognition of rights to nuclear technologies upon compliance with an IAEA Comprehensive Safeguards Agreement. While these efforts and their underpinning justifications were not mentioned specifically in President Bush's February 2004 speech, other NWS officials have frequently alluded to them.

In order to understand these efforts by NWS, one must go through their underpinning logic methodically. This logical progression includes a number of points of treaty interpretation. First in the chain of logical progression is the understanding, expressed by numerous NWS statements, that there is a normative link between Article IV of the NPT and Article III of the NPT. Specifically, this is an understanding that both the rights and the obligations contained in Article IV are conditional in their viability upon NNWS compliance, *inter alia*, with their obligations under Article III. As U.S. representative Andrew Semmel stated to the 2003 PrepCom:

[...] Article IV does not stand alone or in isolation. The inalienable right to develop nuclear energy is not an entitlement but rather flows from demonstrable and verifiable compliance with Articles I, II and III of the Treaty [...]. All NPT parties in good standing need to reinforce the fundamental principle that Article IV benefits are extended only to NPT parties that are clearly in compliance with Articles I, II, and III.⁵⁸

Similarly, U.K. representative John Duncan explained to the 2007 PrepCom that:

Article IV provides for the enjoyment of the benefits of the peaceful uses of nuclear energy. But these inalienable rights come hand in hand with obligations. Obligations to comply fully with the provisions of Articles I, II and III of the Treaty.⁵⁹

French Representative Jean-François Dobelle stated to the 2008 PrepCom that:

⁵⁸ Statement by Dr Andrew K. Semmel, Alternative Representative of the United States of America, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference. *Peaceful Nuclear Cooperation: NPT Article IV*, Geneva, Switzerland, May 7, 2003.

⁵⁹ Statement by Ambassador John Duncan, Head of the UK Delegation to the First Preparatory Committee for the Eighth Review Conference of the Nuclear Non-Proliferation Treaty, April 30, 2007.

3. *NWS Nuclear Policy and Interpretation of the NPT*

No state failing to meet its obligations with regard to non-proliferation and the application of IAEA safeguards, or whose nuclear activities are not directed towards identifiable peaceful ends, can claim the benefit of the stipulations contained in Article IV.⁶⁰

In their combined statement to the 2008 PrepCom, the five NWS stated:

We affirm the inalienable right of all States Party to the NPT under Article IV to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in accordance with the relevant provisions of the Treaty and the relevant principles on safeguards.⁶¹

The conditional normative link between Article IV and Article III is the first step, and is a particular point of treaty interpretation, which I will examine in detail in the next chapter. The second step in this logical progression is the understanding that noncompliance with an IAEA safeguards agreement by a NPT NNWS *per se* constitutes a violation of Article III of the NPT. During the target era, this second understanding was at times stated explicitly by NWS representatives. More often, however, the understanding was expressed by a rhetorical blurring of terms and concepts, which in effect equated, or conflated, safeguards agreement noncompliance with a violation of NPT Article III.

As was frequently the case, one of the most explicit statements of interpretation was given by U.S. representative Christopher Ford, in this case to the 2007 PrepCom:

Article III of the Treaty requires non-nuclear weapon States Party to reach and comply with safeguards agreements with the IAEA.⁶²

A similarly explicit statement of this understanding was given in the joint statement of the NWS to the 2008 PrepCom:

We seek universal adherence to IAEA comprehensive safeguards, as provided for in Article III, and to the Additional Protocol and urge the ratification and implementation of these agreements.⁶³

⁶⁰ Statement by H.E. Ambassador Jean-François Dobelle, Permanent Representative of France to the Conference on Disarmament, Head of the French Delegation, to the Second Session of the Preparatory Committee for the 2010 NPT Review Conference, April 28, 2008.

⁶¹ Statement on behalf of China, France, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, to the 2008 Non-Proliferation Treaty Preparatory Committee, delivered by Ambassador John Duncan, UK Ambassador for Multilateral Arms Control and Disarmament, May 9, 2008.

⁶² A Work Plan for the 2010 Review Cycle: Coping with Challenges Facing the Nuclear Non-proliferation Treaty, by Dr Christopher A. Ford, United States Special Representative for Nuclear Non-proliferation, Opening Remarks to the 2007 Preparatory Meeting of the Treaty on the Non-Proliferation of Nuclear Weapons, April 30, 2007.

⁶³ Statement on behalf of China, France, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, to the 2008 Non-Proliferation Treaty Preparatory Committee, delivered by Ambassador John Duncan, UK Ambassador for Multilateral Arms Control and Disarmament, May 9, 2008.

A prime example of blurring or conflating safeguards agreement noncompliance with NPT breach can be seen in U.S. representative John Bolton's remarks to the 2004 PrepCom:

Despite Iran's massive deception and denial campaign, the IAEA has uncovered a large amount of information indicating numerous major violations of Iran's treaty obligations under its NPT Safeguards Agreement [...]. If Iran continues in its unwillingness to comply with the NPT, the Council can then take up this issue as a threat to international peace and security.⁶⁴

The final step of the logical progression is to complete the transitive sequence thus:

1. Noncompliance with an IAEA safeguards agreement constitutes a breach of NPT Article III,
2. A breach of NPT Article III results in the invalidity of the rights and obligations in Article IV,
3. Thus, noncompliance with an IAEA safeguards agreement results in the invalidity of the rights and obligations in Article IV.

This conditional linkage between NPT Articles III and IV, and the transitive conclusion that noncompliance with a safeguards agreement constitutes breach of the NPT, has been used most frequently by NWS officials with regard to Iran, as seen in John Bolton's statement above. It was used extensively by NWS officials during the target era to justify the non-recognition of Iran's right to peaceful nuclear technologies under NPT Article IV(1), as well as to justify a cessation of nuclear assistance to Iran by supplier states, pursuant to the obligation in Article IV(2).⁶⁵

B. Legal interpretations

The negative and limited view of the peaceful use principles of the NPT, which was manifest in the statements of NWS representatives during the target decade, and which gave rise to the above-described proposals and measures for limiting access to peaceful nuclear technologies, has been justified by NWS officials by reference to legal interpretations of the provisions of the NPT and of the relative priority in the treaty to be assigned to its three principled pillars.

While statements of legal interpretation by state representatives to NPT meetings are relatively rare—the focus of these statements tends to be more

⁶⁴ Statement by United States Under Secretary of State for Arms Control and International Security John R. Bolton, to the Third Session of the Preparatory Committee for the 2005 Review Conference of the Treaty on the Non-proliferation of Nuclear Weapons. 'The NPT: A Crisis of Non-Compliance,' New York, April 27, 2004.

⁶⁵ See, e.g., Statement of Andrew Semmel, Alternative Representative of the United States of America, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference: Peaceful Nuclear Cooperation, Article IV (2003).

policy-oriented than legal—there were a few exceptional statements during the target era which provide insight into the legal interpretations underpinning the policy positions of NWS states toward NPT Article IV. The clearest of these come from U.S. representatives John Bolton and Andrew Semmel.

In his statement on behalf of the United States to the 2004 PrepCom, Bolton said:

In order to address loopholes and the crisis of noncompliance with the NPT, President Bush announced four proposals that would strengthen the Treaty and the governance structures of the International Atomic Energy Agency [...]. The first proposal would close the loophole in the Treaty that allows states like Iran and North Korea to pursue fissile material for nuclear weapons under peaceful cover. Enrichment and reprocessing plants would be limited to those states that now possess them. Members of the Nuclear Suppliers Group would refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants. Nuclear fuel supplier states would ensure a reliable supply of nuclear fuel at reasonable prices to all NPT parties in full compliance with the NPT that agreed to forego such facilities. In this way, nations could use peaceful nuclear power as anticipated by the Treaty, but not to produce fissile material for nuclear weapons. *The Treaty provides no right to such sensitive fuel cycle technologies.*⁶⁶

Later in the same statement, Bolton directly addresses the relationship between NPT Articles II and IV:

The central bargain of the NPT is that if non-nuclear weapons states renounce the pursuit of nuclear weapons, they may gain assistance in developing civilian nuclear power. This bargain is clearly set forth in Article IV of the Treaty, which states that the Treaty's 'right' to develop peaceful nuclear energy is clearly conditioned upon parties complying with Articles I & II. If a state party seeks to acquire nuclear weapons and thus fails to conform with Article II, then under the Treaty that party forfeits its right to develop peaceful nuclear energy.⁶⁷

A year earlier, U.S. representative Andrew Semmel had similarly included legal interpretive commentary in his remarks to the 2003 PrepCom, expanding Article IV conditionality to include Article III as well as Articles I and II:

Article IV of the NPT provides for the 'inalienable right' of all Parties to develop nuclear energy for peaceful purposes. This right is grounded firmly by the Treaty in the clear understanding that such development must be in conformity with the non-proliferation undertakings of Articles I and II. Thus, Article IV does not stand alone or in isolation. The inalienable right to develop nuclear energy is not an entitlement but rather flows from demonstrable and verifiable compliance with Articles I, II and III of the Treaty [...]. All NPT parties in good standing need to reinforce the fundamental principle that

⁶⁶ Statement by United States Under Secretary of State for Arms Control and International Security John R. Bolton, to the Third Session of the Preparatory Committee for the 2005 Review Conference of the Treaty on the Non-proliferation of Nuclear Weapons. 'The NPT: A Crisis of Non-Compliance,' New York, April 27, 2004. Emphasis added.

⁶⁷ *Ibid.*

Article IV benefits are extended only to NPT parties that are clearly in compliance with Articles I, II, and III. Supplier states must forego assistance to states with suspect nuclear programs until the suspicions are resolved. The mere claim of peaceful intent is not sufficient. We all know that IAEA safeguards can never be an absolute guarantee, but states—especially those with ambitious nuclear programs—must back up their claims of peaceful intent and ‘transparency’ by fully implementing the IAEA’s Strengthened Safeguards Additional Protocol.⁶⁸

In addition to stressing the questionable nature of the inalienable right to peaceful nuclear energy codified in NPT Article IV as a true juridically cognizable right (i.e. by stating that it is not an independent entitlement), Semmel in this statement stresses, as would Bolton a year later, the conditional nature of this right. He argues that the inalienable right only ‘flows from *demonstrable and verifiable compliance* with Articles I, II and III of the Treaty,’ and that ‘Article IV benefits are extended only to NPT parties that are *clearly in compliance* with Articles I, II and III.’⁶⁹ He adds that states with ‘suspect nuclear programs’ should be denied Article IV ‘benefits’ (again note, not ‘rights’) until these ‘suspicions are resolved.’⁷⁰ Thus, Semmel clearly sees the inalienable right to peaceful nuclear energy in Article IV to not only be a conditional right, but his interpretation of that conditionality also sets quite a high bar for the fulfilling of the condition precedent of compliance with Articles I, II, and III. Indeed, according to Semmel, an NNWS nuclear program need only be ‘suspect’ for that state to be bereft of any entitlement to enjoy the benefits of developing nuclear energy capacity for peaceful purposes under Article IV. Such a state, he argues, should have its supplies of nuclear fuel and other technologies from supplier states cut off until these suspicions are resolved. He goes on to place the burden for clearing up these suspicions squarely upon the shoulders of the NNWS party under suspicion, noting that they ‘must back up their claims of peaceful intent and “transparency,” at least by implementation of the IAEA Additional Protocol.

Thus, Semmel clearly sees the burden of proof for meeting the conditionality test for enjoyment of the Article IV right to peaceful nuclear energy as being borne by the NNWS states who would claim that right. This could be expressed, juridically, as a rebuttable legal presumption against the Article IV right for NNWS, subject to each NNWS overcoming that presumption by bearing the burden of proof that their nuclear program meets the conditionality test of full and verifiable compliance with Articles I, II, and III of the treaty.

⁶⁸ Statement by Dr Andrew K. Semmel, Alternative Representative of the United States of America, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference. Peaceful Nuclear Cooperation: NPT Article IV, Geneva, Switzerland, May 7, 2003.

⁶⁹ Ibid. Emphasis added.

⁷⁰ In support of this position, see the Statement by H.E. Mr François Rivasseau to the 2005 Review Conference of the Parties to the Treaty on the Non-proliferation of Nuclear Weapons, General Debate, May 5, 2005 (‘My country will ensure that the right to “nuclear energy for peaceful purposes” recognized in Article IV of the NPT be preserved and fully exercised for countries that unambiguously comply with their international obligations.’)

C. Disarmament

Issues of nuclear disarmament and the obligations of Article VI of the NPT have their own rather enigmatic place in the statements of both NWS and NNWS officials during the target era. I use the word enigmatic in part because in this area particularly it seems that NWS and NNWS officials routinely talk past each other as opposed to talking to or with each other. NWS and NNWS officials during this era clearly had fundamentally different understandings of the correct interpretation of the Article VI obligation, and of the policies and actions required of states to bring themselves into compliance with this obligation. Furthermore, the word enigmatic in describing this area also seems appropriate because most of the statements by NWS officials of NPT Article VI during the target era appear intentionally obfuscatory in nature.

Statements by NWS officials to NPT meetings during the target era on the subject of Article VI share essential commonality of structure and substance. Indeed, they read as though a common template was shared by the speech writers of several of the NWS. This template first includes a statement that the state concerned is fully committed to their obligations under Article VI. Then, with more or less detail, depending on the particular state, they lay out their accomplishments in reducing the number of warheads on operational readiness within their arsenals.⁷¹ Such reductions, they insist, are proof positive of their progressive compliance with their Article VI obligation.

The problem with this rhetorical template, essentially shared by the NWS during the target era, is that it is obfuscatory of the issue of the interpretation of Article VI. These statements are obfuscatory in that they give lip service to the obligation of Article VI, but they tend to be quite indeterminate as to what they understand that obligation to be. They are merely vague and absolute statements of support and compliance, generally without discussion of the detailed scope and meaning of the obligation, and how their conduct is in compliance with such a detailed view of the obligation. It must be noted incidentally that this is in stark contrast with the detailed and lengthy discussions in the same statements of the precise contours of NNWS obligations with regard to non-proliferation and peaceful use, and exact accountings and implications of NNWS policy shortcomings.

On the few occasions in which NWS officials spoke in more detailed terms about the content of the Article VI obligation, their comments, and particularly those of U.S. representatives, revealed an interpretation which holds that the Article VI obligation is one of very limited scope—in some cases approaching

⁷¹ See, e.g., Statement on behalf of China, France, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, to the 2008 Non-Proliferation Treaty Preparatory Committee, delivered by Ambassador John Duncan, UK Ambassador for Multilateral Arms Control and Disarmament, May 9, 2008.

non-existence. Furthermore, these statements explicitly marginalize the disarmament pillar of the NPT in prioritization and importance as compared to the non-proliferation pillar of the NPT. These intentionally vague statements, which hide an exceptionally limited understanding of the legal scope of the Article VI obligation, in full knowledge of the exceptional character of that interpretive understanding within the international community, obfuscate or obscure the points of interpretive difference between NWS and NNWS, and make meaningful exchange and debate impossible.

U.S. representative Andrew Semmel's statement to the 2003 PrepCom typifies the frequently conveyed U.S. desire to excuse more rigorous and meaningful discussion of NWS obligations under Article VI, by reference to more important and pressing problems of non-proliferation. His statement is also typical of U.S. statements both in identifying nuclear disarmament as a *goal* of the NPT and not as an *obligation*, as well as in stressing the conditional link between non-proliferation and disarmament—i.e. that disarmament goals will not be attainable without prior improvements in the NWS non-proliferation agenda:

Let me speak briefly to the question of balance in our deliberations. We understand and expect there will be considerable discussion on Article VI issues during our Preparatory Committee sessions. Indeed, much has already been said at this meeting. Nuclear disarmament is a goal of the Treaty and we should have constructive exchanges about it. However, the great majority of responsible NPT parties who value and abide by the Treaty need to recognize also the large issues at stake in actual and potential cases of noncompliance with Article II. There is a simple logic: more states with nuclear weapons means a more dangerous world. It also means that the overall NPT goal of the elimination of nuclear weapons would become even more difficult to achieve.⁷²

U.S. representative John Bolton's statement to the 2004 PrepCom similarly marginalizes NPT Article VI. In one of only six sentences in his entire statement discussing Article VI issues—in which the word 'disarmament' is never used—Bolton clearly puts Article VI issues in their place when he says:

Enforcement is critical. We must increase the costs and reduce the benefits to violators, in ways such as the proliferation Security Initiative now being pursued actively around the world, and which President Bush has proposed strengthening further [...] We cannot hope the problem will go away. We cannot leave it to 'the other guy' to carry the full measure of the challenge of demanding full compliance. We cannot divert attention from the violations we face by focusing on Article VI issues that do not exist. If a party cares about the NPT, then there is a corresponding requirement to care about violations and enforcement.⁷³

⁷² Statement by Dr Andrew K. Semmel, Alternative Representative of the United States of America, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference. Peaceful Nuclear Cooperation: NPT Article IV, Geneva, Switzerland, May 7, 2003.

⁷³ Statement by United States Under Secretary of State for Arms Control and International Security John R. Bolton, to the Third Session of the Preparatory Committee for the 2005 Review Conference of the Treaty on the Non-proliferation of Nuclear Weapons. 'The NPT: A Crisis of Non-Compliance,' New York, April 27, 2004.

However, by far the most extreme position on Article VI interpretation during the target era was taken by U.S. representative Christopher Ford. Ford's statements to the NPT PrepComs in both 2007 and 2008 were clearly carefully rhetorically constructed to convey an understanding of the limited—at times approaching nonexistent—nature of the Article VI obligation upon the U.S. As he stated to the 2008 PrepCom:

States Party know that the United States remains firmly and unequivocally committed to the disarmament goals of the Preamble and Article VI of the NPT, and indeed that we have become a leading contributor to international discussions of how to move forward toward those ends [...] Thanks to these efforts and to those of some of the other NWS, Article VI discourse is now gradually arriving at the place where disarmament debate *should* have been all along. In short, astonishing progress has already been achieved and is continuing, most of the NWS are becoming increasingly accustomed to a constructive degree of voluntary transparency about nuclear matters, and there seems to be a growing interest in realistic and practical discussions about the possibility of nuclear disarmament.⁷⁴

Ford is careful here to identify the nature of the disarmament principle in NPT Article VI as a goal, rather than as an obligation. The United States, he says, is committed—note not obligated—to this goal. The limited and attenuated normative character of the Article VI obligation is again expressed in a speech Ford gave in 2007 at a conference in France:

[...] the NPT nonetheless clearly expresses in its Preamble the intention of all States Party to facilitate both nuclear and general disarmament, and in its Article VI their commitment to pursue negotiations in good faith relating to those goals [...] The United States remains committed to the goals of the NPT, and is in full conformity with its Article VI obligations.⁷⁵

Interestingly, Ford does in this statement acknowledge that there is an obligatory aspect to Article VI. However, he also reiterates the position that the disarmament principles in Article VI are merely goals of the treaty. This then begs the question: if disarmament principles do not constitute the obligatory aspect of Article VI, what does? We find Ford more candidly stating his view on the legal interpretation of Article VI, and answering the question of his understanding of the scope and meaning of the legal obligation in Article VI, in his non-official writings published while he served as United States Special Representative for Nuclear Non-proliferation.

In a 2007 article published in the *Non-proliferation Review*, Ford argues that the only legal obligation contained in NPT Article VI is an obligation on all

⁷⁴ 'A Recipe for Success at the 2010 Review Conference,' Dr Christopher A. Ford, United States Special Representative for Nuclear Non-proliferation, Opening Remarks to the 2008 NPT Preparatory Committee, Palais des Nations, Geneva, Switzerland, April 28, 2008.

⁷⁵ 'Disarmament, the United States and the NPT,' Address by Dr Christopher Ford, United States Special Representative for Nuclear Non-proliferation, delivered at the Conference on 'Preparing for 2010: Getting the Process Right,' Annecy, France, March 17, 2007.

states to pursue negotiations in good faith.⁷⁶ He argues that the International Court of Justice was incorrect in its 1996 Advisory Opinion conclusion that the Article VI obligation 'is an obligation to achieve a precise result—nuclear disarmament in all its aspects—by adopting a particular course of conduct, namely, the pursuit of negotiations on the matter in good faith.'⁷⁷ Furthermore, not only was the ICJ incorrect that the Article VI obligation is an obligation to achieve disarmament results through good faith negotiation, Ford argues that the Article VI obligation is not even an obligation of negotiation in good faith. Rather, it is merely an obligation to pursue negotiations in good faith. As he explains:

[...] the language about negotiations needing to be 'pursue[d] [...] in good faith' clearly leaves open the possibility that such negotiations might not take place, let alone succeed. It would hardly have been difficult for the drafters (as a matter of grammar and syntax, at least) to require the engagement in or conclusion of negotiations. But to specify instead merely the pursuit of negotiation in good faith acknowledges the reality that a party may honestly try, but fail—perhaps through no fault of its own, such as in the event of a failure of good faith by other parties—to bring about a meaningful negotiation or agreement [...]

It is clear [...] that the only sensible reading of Article VI in compliance analysis must dismiss the ICJ's ill-considered dictum about 'concluding' negotiations and retain as its touchstone only the element of good faith effort in pursuit of disarmament negotiations. If there is good faith effort toward negotiations, then there is compliance; if there is not, then there is noncompliance.⁷⁸

He thus concludes:

The negotiating history makes quite clear that the plain language of Article VI is no accident and that its meaning is precise: all states party are required to pursue good faith negotiations toward the article's stated goals, but they are not legally required—and could not reasonably be legally required—to conclude such negotiations. Arguments that Article VI should require concrete disarmament steps of the nuclear weapon states, and efforts to enumerate specific mandatory steps, were rejected.⁷⁹

Ford's argument is thus that the only legal obligation in NPT Article VI relating to disarmament is an extremely limited obligation to put forth 'good faith effort toward negotiations' on disarmament. This interpretive understanding is clearly expressed in his and other U.S. official statements to NPT meetings throughout the target era.

⁷⁶ Christopher A. Ford, 'Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,' 14(3) *Non-proliferation Review* (November 2007).

⁷⁷ *Advisory Opinion on the Threat or Use of Nuclear Weapons*, ICJ Reports, 1996, p. 26, para. 99. For explication of the ICJ Advisory Opinion, see Daniel H. Joyner, *International Law and the Proliferation of Weapons of Mass Destruction* (2009) ch. 5.

⁷⁸ Christopher A. Ford, 'Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,' 14(3) *Non-proliferation Review* (November 2007) 403, 411.

⁷⁹ *Ibid.* at 408.

Based on this understanding of the limited scope of the Article VI obligation, the United States and the other NWS throughout the target decade offered, as the primary, and often exclusive, evidence of their progressive compliance with Article VI, their unilateral and at times bilateral arms reduction efforts.

The interpretive obfuscation by NWS during this decade was not lost on NNWS, whose statements frequently contain criticism of the NWS for their lack of meaningful progress in complying with what NNWS almost uniformly saw as a much more substantive disarmament obligation in NPT Article VI. Representing the 118 member states of the Non-Aligned Movement, Indonesia's statement to the 2008 PrepCom lamented:

It is most unfortunate that the NWS and those remaining outside the NPT continue to develop and modernize their nuclear arsenals, imperiling regional and international peace and security, in particular in the Middle East. The recent developments, in this regard, illustrate a trend of vertical proliferation and non-compliance by NWS towards their commitments under Article VI of the NPT.⁸⁰

As Egypt explained in its statement to the 2008 PrepCom:

Egypt welcomes reductions made by the Nuclear Weapon States in their nuclear arsenals [...] We reiterate however that such reductions do not as yet meet the expectations of the vast majority of States Parties. This is especially the case in light of qualitative developments undertaken in nuclear arsenals, which reaffirm that Nuclear Weapon States continue to rely on nuclear deterrence as a salient feature in their strategic security policies. This situation casts serious doubts on commitments to nuclear disarmament and the implementation of Article VI and thus disrupts the delicate balance upon which the Treaty is based.⁸¹

Specifically with regard to the development by NWS of new generations of nuclear weapons, the statement by New Zealand to the 2008 PrepCom on behalf of the New Agenda Coalition (Brazil, Egypt, Ireland, Mexico, New Zealand, South Africa, and Sweden) noted:

The New Agenda Coalition welcomes indications from some nuclear-weapon States that further cuts in nuclear arsenals are being advanced. However, the Coalition remains seriously concerned that intentions to modernize other nuclear forces seem to persist. The Coalition reiterates that States should not develop new nuclear weapons or nuclear weapons with new military capabilities or for new missions, nor replace nor modernize their nuclear weapon systems, as any such action would contradict the spirit of the disarmament and non-proliferation obligations of the treaty.⁸²

⁸⁰ Statement by H.E. Gusti Agung Wesaka Puja, Ambassador of the Republic of Indonesia, 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 the Non-proliferation of Nuclear Weapons, April 28, 2008.

⁸¹ General Statement of Egypt to the Second Preparatory Committee of the 2010 NPT Review Conference, April 28, 2008.

⁸² Statement by H.E. Don Mackay, Permanent Representative of New Zealand to the United Nations in Geneva, on Behalf of the New Agenda Coalition, to the Preparatory Committee for the

The interpretation of Article VI which is reflected in these statements is one which understands the legal obligation in Article VI to be a substantive disarmament obligation. Not just an obligation to pursue negotiations toward disarmament, but an obligation to achieve, at least in progressive fashion, the result of full nuclear disarmament. This interpretation views the obligation of good faith effort in Article VI as applying not just to negotiations on disarmament, but also to state policies and state actions in the progressive direction of actual nuclear disarmament. It should be noted that this interpretation is essentially consistent with the interpretation of Article VI given by the International Court of Justice in its 1996 Advisory Opinion, quoted in part above.⁸³

2010 Review Conference of the Parties to the Treaty on the Non-proliferation of Nuclear Weapons, General Debate, April 28, 2008.

⁸³ *Advisory Opinion on the Threat or Use of Nuclear Weapons*, ICJ Reports, 1996.

As has often been observed with regard to the record of preparatory negotiations and statements of lawmakers made in the sometimes years long process of drafting law, whether it be in the context of an international treaty or a piece of domestic legislation, most any interpretive position on the resulting law can be maintained by reference to some portion of this preparatory record.⁴ One can therefore see the wisdom of the VCLT's drafters in placing primacy in treaty interpretation upon textual analysis, and in relegating *travaux* materials to a secondary interpretive role.

In summary, then, by reference to the guiding principles of interpretation of the NPT, produced through the consideration in Chapter 2 above of the VCLT rules of treaty interpretation, and in particular the concepts of context and object and purpose, it is legally incorrect to conclude that the non-proliferation pillar of the NPT, and the textual provisions which comprise it, are of higher importance or normative weight in interpretation than are the provisions comprising the peaceful use and disarmament pillars of the NPT. Interpretations by NWS officials during the target era, which concluded that the non-proliferation provisions of the NPT are the principal, primary, central, or core provisions of the treaty, were thus incorrect, as many NNWS representatives were at pains to point out in their statements.

II. Peaceful Use

As reviewed in Chapter 3, when NWS officials made reference during the target era to the development and use of peaceful nuclear technologies by NNWS, they customarily emphasized the dangers inherent in NNWS pursuit of civilian uses of nuclear energy, and in particular their pursuit of indigenous capabilities for production of fissile materials. These statements by NWS representatives frequently included a very narrow and limited view of the rights recognized and obligations created in NPT Article IV. Under this limited view, the rights and obligations of Article IV are clearly and tightly circumscribed by the non-proliferation obligations of Articles I, II, and III. These statements make clear the view that the Article IV rights and obligations are secondary in priority to the non-proliferation obligations of Articles I, II, and III, and are only operative on condition of prior full and demonstrated compliance with these normatively superior non-proliferation obligations.

In their legal interpretive arguments, U.S. representatives John Bolton and Andrew Semmel stressed the conditionality of the Article IV right. Bolton argued that the NPT provides no right to indigenous possession of the elements of the nuclear fuel cycle. And Semmel went so far as to hold that the Article IV

inalienable right is not an independent entitlement at all, but rather operates more as a privilege, enigmatically flowing to NNWS from their compliance with Articles I, II, and III.⁵

This negative and limited view of the peaceful use pillar of the NPT, as justified by reference to these legal interpretations of Article IV, is reflected in a number of proposals and high level efforts by NWS during the target decade aimed at circumscribing and conditioning the right of NNWS to nuclear fuel cycle technologies, and at changing the conditions under which supplies of nuclear technologies are made to NNWS by NWS and other supplier states. These proposals and efforts include:

1. Requiring NNWS to exclusively source nuclear material from a multilateral fuel bank as a condition of supply;
2. Requiring NNWS accession to the IAEA Additional Protocol as a condition of supply; and
3. Conditioning supply and recognition of rights to nuclear technologies on compliance with an IAEA Comprehensive Safeguards Agreement.

A. Interpretation of Article IV(1)

As a matter of treaty interpretation, it is important to reiterate the following guiding interpretive principles, taken from the analysis in Chapter 2 above of the context of NPT provisions and the object and purpose of the NPT itself, at the beginning of an interpretive analysis of NPT Article IV(1). First is that the three principled pillars of the NPT represent the dual-use character of nuclear energy applications. The NPT is fundamentally addressed to regulating nuclear energy in its full dual-use nature and range of applications, and is not exclusively or even primarily addressed to regulating only nuclear weapons.

Second is that these three principled pillars *together* comprise the object and purpose of the NPT. They are inherently linked and interdependent upon each other in their meaning, and must be viewed in a balanced manner. When conducting that balancing, the three pillars should be understood as presumptively juridically equal, i.e. none of the pillars should be presumed to be of higher prioritization in legal interpretation of the NPT's provisions than any other.

As explained in Chapter 2, this second principle of the object and purpose analysis of the NPT—i.e. that all three of the principled pillars comprising the object and purpose of the NPT should be considered to be presumptively equal

⁵ Statement by United States Under Secretary of State for Arms Control and International Security John R. Bolton, to the Third Session of the Preparatory Committee for the 2005 Review Conference of the Treaty on the Non-proliferation of Nuclear Weapons. 'The NPT: A Crisis of Non-Compliance' New York, April 27, 2004; Statement by Dr Andrew K. Semmel, Alternative Representative of the United States of America, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference. Peaceful Nuclear Cooperation: NPT Article IV, Geneva, Switzerland, May 7, 2003.

⁴ See, e.g., Leonard Levy, *Original Intent and the Framers' Constitution* (1988).

in legal weight—should be applied as a presumption, or baseline in interpretation of the NPT's provisions. As noted, there are, however, instances in the NPT's provisions where there is evidence in the text of the specific intent of the parties as to the relationship between treaty articles or principles, sometimes representing the relationship between principled pillars. One of the clearest examples of this is to be found in Article IV(1).

When such evidence of the specific intent of the parties is found in the text, this evidence will constitute an exception to this presumption or baseline, and the terms of the particular provision will govern the relationship between the articles or principles, inclusive of the relationship between principled pillars. However, flowing from the fundamental nature of the interpretive principles of context and object and purpose of the treaty, as stipulated in VCLT Article 31, is the understanding that this textual specificity should itself still be understood in light of the overall context of the provision and the object and purpose of the treaty—which in the case of the NPT provides for the juridical equality of the principled pillars as the presumption or baseline from which the specificity is a limited textual carve-out.

With these guiding principles in mind, it is possible to follow the rules of interpretation in VCLT Articles 31 and 32 to produce a correct interpretation of NPT Article IV(1), which is the paragraph of Article IV most relevant to NWS arguments regarding the nature of the NNWS right to peaceful nuclear energy technologies. Article IV(1) provides:

Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II of this Treaty.

The first term of interpretive interest is the term characterizing the right described in this paragraph as an 'inalienable right.' The plain meaning of the term 'inalienable right' is a right which cannot be given, taken, or in any way transferred away from its holder. This term is very rare in international law. It is used with some frequency in international human rights treaties.⁶ However, when referencing the right of a state, and not of individuals, there appears to be only one context apart from its appearance in the NPT in which the right of a state is termed to be an 'inalienable right.' This is in the context of U.N. General Assembly resolutions discussing the principle of permanent sovereignty over natural resources.⁷ Closely

semantically related, however, is the term 'inherent right.' Outside of the international human rights law context, the term 'inherent right' appears to occur in only one instance of treaty law. This of course is Article 51 of the United Nations Charter, which provides that:

[n]othing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.

As with the 'inherent right' characterization of self-defense in Article 51 of the U.N. charter, the 'inalienable right' characterization of the right to peaceful nuclear materials and technologies in NPT Article IV conveys a particular legal meaning. In both treaties, these unique descriptions appear to designate the right thus characterized as a right which is not created by the present conventional instrument, but rather as a pre-existing right with an existence independent of the treaty, and only recognized by its terms.⁸ Both the right to self-defense and the right to peaceful nuclear materials and technology are thus identified as rights of states which exist independently of treaty law. This begs the question of the jurisprudential character of these state rights—or of any other rights of states for that matter.

The concept of rights which a state holds by virtue of its statehood is one which has never been satisfactorily constructed or explained in international law, and a comprehensive list of such rights has never been agreed upon. In 1949 the newly established International Law Commission adopted a draft Declaration on Rights and Duties of States. This draft Declaration consisted of 14 draft Articles which enunciated, in broad terms, some of the basic rights and duties of states. The 1949 draft Declaration was never adopted by the General Assembly, and largely fell by the wayside as geopolitical shifts over the subsequent decades made agreement on a statement of states' 'fundamental' rights diminishingly likely. In 1970 a successor statement to the 1949 draft Articles was adopted by the General Assembly, entitled the Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States.⁹ This 1970 Declaration predominantly discussed principles of states' obligations, such as the obligation not to use or threaten force against other states, or otherwise to intervene in the affairs of other states. However, in its discussion of the principle of the sovereign equality of states, it does delineate some of the most basic rights of states, including the right 'freely to choose and develop its political, social, economic and cultural systems.' Neither the 1949 draft Declaration, nor the 1970 Declaration can be described as systematically addressing the subject of states' rights, and certainly cannot be claimed to list such rights exhaustively.

⁸ See Daniel H. Joyner, *International Law and the Proliferation of Weapons of Mass Destruction* (2009) ch 7.

⁹ General Assembly Resolution 2625.

⁶ See the Universal Declaration of Human Rights (Preamble), the International Covenant on Civil and Political Rights (Preamble), and the International Covenant on Economic, Social and Cultural Rights (Preamble).

⁷ See U.N. General Assembly Resolutions 3171 (1973) and 3281 (1974). Similar terms occur in the context of General Assembly resolutions on the principle of self-determination, however, self-determination in international law is not strictly speaking a right of states, but more precisely the right of a people in a particular geographical place to constitute or create a state.

Thus, in the context of the inherent right of self-defense in the U.N. Charter, and the inalienable right to peaceful nuclear materials and technology in the NPT, we are left with a conventional designation of these rights as rights inuring to all states by virtue of their statehood, but with little explanation as to the jurisprudential meaning and effect of this designation.

Perhaps the most important inquiry for the purpose of treaty interpretation is the relationship between an 'inalienable' or 'inherent' state right recognized in a treaty provision, and the other conventional terms in that treaty provision or in other provisions within the same treaty, including conventionally agreed obligations on states parties which can be read to set limits or circumscriptions upon that state right.

One of the few principles of international law clearly relevant to a discussion of the scope and meaning of the rights, or scope of legally unimpeachable acts, of states is the *Lotus* principle, announced by the Permanent Court of International Justice in a case of the same name in 1927.¹⁰ This principle provides that 'restrictions upon the independence of States cannot [...] be presumed' and that international law recognizes that states possess 'a wide measure of discretion which is only limited in certain cases by prohibitive rules'.¹¹ In essence, the *Lotus* principle provides that states are free to engage in any activity they wish unless that activity has been prohibited in a source of international law. Another way to phrase the *Lotus* principle is as a recognition that states have the original or inherent or inalienable right to engage in any activity which is not prohibited to them by a positive source of international law.

Taking the *Lotus* principle as an interpretive guide, as provided for in VCLT Article 31(3)(c), for purposes of treaty interpretation a right of states recognized in a treaty should be presumed to include within its permissive terms the fullest possible range of state actions. The legal permissibility of a state engaging in these actions should be contravened by prohibitive obligations within the same treaty provision or other provisions in the same treaty, *only to the extent that the prohibited activities are clearly delineated by the conventional obligation*. The interpretive presumption of scope and meaning should lie with permissibility of state actions related to the recognized right, and not with conventional prohibitions of state actions related to the recognized right, also present in the treaty.

This interpretive reading is in complete harmony with a reading of the term 'inalienable right' in NPT Article IV(1) in this provision's context within the NPT. Article IV(1) operates within the NPT as a recognition of the residual rights of all states party, and particularly NNWS parties, to develop, produce, and use peaceful nuclear energy materials and technologies. This recognition is important in the context of the agreed obligation of NNWS in Article II of the NPT not to manufacture, obtain, or possess nuclear weapons. The conventional prohibitive obligation in Article II regarding nuclear weapons constitutes a

positive international legal limitation on states' rights to engage in any nuclear activity they wish, pursuant to the *Lotus* principle. However, Article IV(1) serves in this context to clarify that states retain all rights to engage in nuclear activities which are not clearly delineated by the conventional prohibitive obligation in Article II and by those terms forbidden to them.

This interpretation of the term 'inalienable right' in NPT Article IV(1), which is informed by the context of Article IV(1) within the NPT and by the *Lotus* principle as a relevant rule of international law, itself provides important interpretive context for the final words of Article IV(1), which stipulate that the inalienable right of states parties to develop research, production, and use of nuclear energy for peaceful purposes must be exercised 'in conformity with articles I and II of this Treaty.'

Before proceeding, it is necessary to note that the final document of the 2000 NPT Review Conference contains the following statement:

The Conference reaffirms that nothing in the Treaty shall be interpreted as affecting the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I, II and III of the Treaty.

NPT Review Conference final documents, which are as a rule adopted by the unanimous consent of conference participants, fit well under VCLT Article 31(3)(a) as sources of 'subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions'.¹² Thus, statements from Review Conferences should be taken into account in interpretation of treaty provisions, along with context. Here, then, the treaty text of Article IV(1) which reads 'in conformity with articles I and II of this Treaty' should be interpreted taking into account that the NPT's parties have agreed on an interpretation of these words which includes Article III as well as Articles I and II. Thus, Article IV(1) should generally be read and interpreted to include a reference to Article III along with its existing reference to Articles I and II.

In these closing words of Article IV(1), then, we have a reference to obligations created by the treaty with which the right recognized in Article IV(1) is to be exercised 'in conformity.' The treaty obligations in Articles I, II, and III can be described as prohibitive or at least limiting in character, in that they prohibit certain acts related to nuclear energy, or at least limit states' freedom of action in this area. Thus, we have the situation described above in which a state right recognized in a treaty provision is to be limited or circumscribed by conventional obligations contained within the same treaty.

In light of the context of these final words of Article IV(1) within Article IV(1) itself, and the article's recognition of an 'inalienable right' which term has been

¹² See Burrus Carnahan, 'Treaty Review Conferences,' 81 *American Journal of International Law* (1987) 226, 229.

¹⁰ PCIJ, Ser. A, No. 10, 1927.

¹¹ Ibid. at pp. 18 and 19.

interpreted above, the plain meaning of the words 'and in conformity with' would seem to be usefully rephrased as '*as limited by*.' Again, in light of the context of Article IV(1) within the NPT, and its role as discussed above in clarifying that states retain all rights to engage in nuclear activities which are not clearly delineated by the conventional prohibitive obligations of the treaty, interpreting 'in conformity with' as '*as limited by*' makes contextual sense.

Thus, Article IV(1) provides that *the right of all states to develop, produce, and use peaceful nuclear energy materials and technologies is limited by Articles I, II, and III of the NPT*. This reading is consistent with the *Lotus* principle relative to the rights of states discussed above, in providing that *states party to the NPT may engage in any peaceful use of nuclear energy materials and technology, as limited only by the clearly delineated terms of the prohibitive/limiting conventional obligations contained in Articles I, II, and III*.

This interpretation appears fully consistent with the object and purpose of the treaty, which again is composed of all three of the NPT's principled pillars in juridical equality. This principle of the combined and interdependent nature of the three pillars as the object and purpose of the treaty is in perfect harmony with an interpretation of Article IV(1) which provides for a broadly interpreted residual recognition of the right of all states to peaceful uses of nuclear energy material and technologies, as limited and circumscribed through the specific intent of the parties expressed in the text, by clearly delineated non-proliferation obligations in Articles I, II, and III. The object and purpose of the NPT thus characterized, can be confirmed by reference to the *travaux préparatoires* of the treaty taken as a whole, as discussed in Chapter 2.

B. Application of the interpretation

Having arrived at an interpretation of Article IV(1) by the use of the holistic interpretive method prescribed by the VCLT, I can now proceed to contrast that interpretation to the interpretations cited above by NWS officials during the target era, as they are clearly fundamentally at odds.

Semmel's extreme argument that the inalienable right in Article IV(1) is not a right at all, but a privilege that enigmatically flows from compliance with Articles I, II, and III is clearly erroneous, as this non-recognition of the legal status of the Article IV(1) right is contradicted by the plain meaning of the text.¹³

More common among NWS officials, however, and stated explicitly by John Bolton, is the interpretation of the conditionality of the inalienable right upon NNWS compliance with Articles I, II, and III.¹⁴ Under the interpretation I have

¹³ Statement by Dr. Andrew K. Semmel, Alternative Representative of the United States of America, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference, Peaceful Nuclear Cooperation: NPT Article IV, Geneva, Switzerland, May 7, 2003.

¹⁴ Statement by United States Under Secretary of State for Arms Control and International Security John R. Bolton, to the Third Session of the Preparatory Committee for the 2005 Review

advanced herein, this interpretive conclusion is incorrect. The link between Articles I, II, and III on the one hand, and the Article IV(1) right on the other is not one of conditionality. Rather, it is one of a limited conventional circumscription or limitation of an inalienable state right. Articles I, II, and III prohibit certain activities and mandate others with regard to nuclear weapons. These are obligations which NNWS have taken on themselves, and their compliance with these obligations must be determined through proper juridical mechanisms, both inside and outside of the NPT context. However, *NNWS compliance or non-compliance with these non-proliferation obligations has no per se conditional effect upon the residual right of NNWS to engage in the peaceful use of nuclear energy materials and technologies recognized in Article IV(1)*. Such conditionality would be in disharmony with the understanding of states' rights pursuant to the *Lotus* principle, and to the role of Article IV(1) in the context of the NPT, as discussed above.

Related to the conditionality interpretation—in a sense a lesser included argument within this interpretation—and incorrect for the same reasons, is the argument by Semmel and others that the burden for resolving any suspicions regarding a NNWS's domestic nuclear program lies with the subject NNWS itself. As Semmel himself stated to the 2003 PrepCom:

Supplier states must forego assistance to states with suspect nuclear programs until the suspicions are resolved. The mere claim of peaceful intent is not sufficient [...] states—especially those with ambitious nuclear programs—must back up their claims of peaceful intent and 'transparency' by fully implementing the IAEA's Strengthened Safeguards Additional Protocol.¹⁵

As manifest in Semmel's comments, during the target era the NWS interpretation of the conditionality of the Article IV(1) right, as supplemented by this burden placement interpretation, became an important legal argument underpinning proposals for the requirement of accession to the IAEA Additional Protocol as a condition of nuclear supply, as such a measure would potentially enhance the ability of the NWS to determine the compliance of NNWS with their non-proliferation obligations, and thus clarify whether a particular NNWS was entitled to enjoy their right to peaceful use.

As an additional interpretation, Bolton specifically argued in his statement to the 2004 PrepCom that the NPT provides no right to enrichment and reprocessing (ENR) technologies.¹⁶ In essence, this is an argument that, while Article

Conference of the Treaty on the Non-proliferation of Nuclear Weapons. 'The NPT: A Crisis of Non-Compliance,' New York, April 27, 2004.

¹⁵ Statement by Dr. Andrew K. Semmel, Alternative Representative of the United States of America, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference, Peaceful Nuclear Cooperation: NPT Article IV, Geneva, Switzerland, May 7, 2003.

¹⁶ Statement by United States Under Secretary of State for Arms Control and International Security John R. Bolton, to the Third Session of the Preparatory Committee for the 2005 Review

IV(1) recognizes some rights to peaceful nuclear uses for NNWS, it does not recognize a right of NNWS to indigenous control over the nuclear fuel cycle.

This argument is an interpretive answer to the apparent existence of a 'loophole' in the NPT, which President Bush bemoaned and sought to close in his 2004 speech.¹⁷ Other commentators have referred to this loophole problem as the 'latent proliferation' problem, meaning that under the NPT, NNWS can potentially develop a nuclear program which could be turned into a weapons program in relatively short order, all under the legal umbrella of the Article IV(1) inalienable right. Then, at a time of their choosing, they could break out of the treaty with a weapons program, the development of which has been assisted by the IAEA and other states under the guise of a civilian nuclear energy program.¹⁸ Ariel Levite has referred to this as the strategy of 'nuclear hedging'.¹⁹ The interpretive argument by Bolton, that the Article IV(1) right does not cover indigenous control over the nuclear fuel cycle, became a common argument underpinning the multilateral fuel cycle proposals discussed in Chapter 3.

However, this interpretation that NNWS do not have a right to indigenous control over the nuclear fuel cycle is incorrect. The best way to approach this analytically is to begin with first principles of international law, one of which is contained in the *Lotus* principle, discussed above.²⁰ Again, this principle holds that states may do what they like absent some prohibitive rule of international law which forbids a certain action. With that principle as a guide, correctly interpreting the inalienable right in Article IV(1) becomes possible. As concluded above, this right should be interpreted to provide that states party to the NPT may engage in any peaceful use of nuclear energy materials and technology, as limited only by the clearly delineated terms of the prohibitive/limiting conventional obligations contained in Articles I, II, and III. This then creates an interpretive presumption toward the legitimacy of peaceful uses of nuclear materials and technology in the absence of evidence that a particular such use is prohibited in Articles I, II, or III. ENR technologies are nowhere prohibited in NPT Articles I, II, or III. *Therefore, pursuant to the Lotus principle, NNWS have a right to ENR technologies and to other peaceful possessions and uses of fuel cycle technologies, just as they have the right to exist and to defend themselves.* None of these rights derive from treaties or other positive sources of international law. They are simply includable among the plenary rights inuring to a state by virtue of its statehood.

Conference of the Treaty on the Non-proliferation of Nuclear Weapons. 'The NPT: A Crisis of Non-Compliance,' New York, April 27, 2004.

¹⁷ Remarks by U.S. President George W. Bush on Weapons of Mass Destruction Proliferation, Fort Lesley J. McNair—National Defense University, Washington D.C., February 11, 2004.

¹⁸ See Christopher Chyba, 'Second-Tier Suppliers and Their Threat to the Nuclear Non-proliferation Regime,' in Joseph Plati, ed., *Atoms for Peace: A Future after Fifty Years?* (2007) p. 121.

¹⁹ 'Never Say Never Again: Nuclear Reversal Revisited,' 27(3) *International Security* (2002–2003) 59–88.

²⁰ PCIJ, Ser. A, No. 10, pp. 18 and 19.

If any further persuasion is needed, an analysis of the plain meaning of the terms of Article IV(1) and the associated paragraphs of the preamble of the NPT, also supports this conclusion. The inalienable right is described in Article IV(1) as a right 'to develop research, production and use of nuclear energy for peaceful purposes.' In the seventh paragraph of the preamble to the NPT, all states are recognized to be 'entitled [...] to contribute alone or in cooperation with other States to, the further development of the applications of atomic energy for peaceful purposes.' Thus, the plain meaning of the terms of Article IV(1), as read along with the preamble of the treaty, clearly conceives of states having independent control over the means to pursue research on and development of applications of nuclear energy for peaceful purposes. Enrichment and reprocessing technologies are absolutely integral technologies in the nuclear fuel cycle, and are therefore included within this entitlement.

C. Conditioning supply and recognition of Article IV rights on compliance with an IAEA Comprehensive Safeguards Agreement

I would like to pay particular analytical attention at this point to the treaty interpretations given by NNWS during the target period in order to justify the conditioning of nuclear supply, and recognition of the Article IV(1) right to peaceful use, upon NNWS compliance with an IAEA Comprehensive Safeguards Agreement. As discussed in Chapter 3, there are several points of treaty interpretation included within the logical progression of interpretation maintained by NNWS officials. I identified these steps of interpretive progression as occurring within the following transitive sequence:

1. Noncompliance with an IAEA safeguards agreement constitutes a breach of NPT Article III,
2. A breach of NPT Article III results in the invalidity of the rights and obligations in Article IV,
3. Thus, noncompliance with an IAEA safeguards agreement results in the invalidity of the rights and obligations in Article IV.

As I explained in Chapter 3, this conditional normative linkage between NPT Articles III and IV, and the transitive conclusion that noncompliance with a safeguards agreement constitutes breach of the NPT, was used by NNWS officials during the target era in order to justify the non-recognition of Iran's right to peaceful nuclear technologies under NPT Article IV(1), as well as to justify a cessation of nuclear assistance to Iran by supplier states, pursuant to the obligation in Article IV(2).²¹

²¹ See, e.g., Statement of Andrew Semmel, Alternative Representative of the United States of America, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference: Peaceful Nuclear Cooperation, Article IV (2003). For more detailed discussion of the Iran case, see Daniel H. Joyner, *International Law and the Proliferation of Weapons of Mass Destruction* (2009) p. 50.

The interpretation of a conditional linkage between Article III and Article IV, which forms an integral part of this transitive sequence, is an argument that I have already addressed above.²² I concluded above that NNWS compliance or non-compliance with Articles I, II, and III has no *per se* conditional effect upon the residual right of NNWS to engage in the peaceful use of nuclear energy materials and technologies recognized in Article IV(1). This conclusion, taking away one of the two interpretive pillars of this transitive sequence, on its own renders the interpretive sequence incorrect.

However, I will assume *arguendo* for the moment that the NWS interpretation on conditionality between Article III and Article IV is correct. I will do so to show that, even if it was correct, the other interpretive pillar of this transitive sequence—that noncompliance with an IAEA safeguards agreement constitutes a breach of NPT Article III—is also incorrect.

Returning to the discussion in Chapter 3 of the identity, role, and authorities of the IAEA, it will be recalled that the IAEA is its own self-enclosed treaty-based international organization. Its existence predates that of the NPT by more than a decade. It has its own constitutional treaty—the IAEA Statute—and its own separate membership as an international organization. Its statute contains detailed rules and procedures regarding its functioning and authority. The IAEA's only legal connection to the NPT is the obligation in Article III.4 of the NPT for all NNWS parties to 'conclude agreements with the International Atomic Energy Agency to meet the requirements of this Article.'

Some have argued that the operative legal obligation for NNWS in Article III is contained in Article III.1. They point to the language in Article III.1 stating that each NNWS 'undertakes to accept safeguards as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency [...] and to the phrases 'Procedures for the safeguards required by this Article shall be followed with respect to source or special fissionable material [...] and 'The safeguards required by this Article shall be applied on all source or special fissionable material [...]'. They see in these terms an obligation in Article III.1 not only to enter into a safeguards agreement with the IAEA, but also an obligation to comply with the terms of that safeguards agreement.²³

However, a closer reading of the whole of Article III renders this interpretation unpersuasive. Article III does contain an obligation for NNWS to enter

²² In addition to official statements of this erroneous argument, it has additionally been made in non-proliferation literature by diplomatic and academic observers. See, e.g., John Carlson, 'Defining Noncompliance: NPT Safeguards Agreements,' 39(4) *Arms Control Today* (May 2009) 22; N. Jansen Calamita, 'Sanctions, Countermeasures, and the Iranian Nuclear Issue,' 42 *Vanderbilt Journal of Transnational Law* (2009) 1393, 1397.

²³ See, e.g., John Carlson, 'Defining Noncompliance: NPT Safeguards Agreements,' 39(4) *Arms Control Today*, (May 2009) 22 ('Noncompliance with an NPT safeguards agreement constitutes violation of Article III of the NPT, the obligation to accept safeguards on all nuclear material [...]').

into a safeguards agreement with the IAEA. That obligation is discussed in Article III.1, but is stated with even more clarity and specificity in Article III.4 which states: 'Non-nuclear-weapon States Party to the Treaty shall conclude agreements with the International Atomic Energy Agency to meet the requirements of this Article [...]'

Additionally, reading into Article III.1's provisions an independent obligation to comply with the terms of the safeguards agreement to be negotiated with the IAEA produces a redundancy from a normative system perspective. One of the fundamental system rules of international law is contained in the customary international law rule of *pacta sunt servanda* ('treaties are to be observed'), which holds that parties to a treaty are under an obligation to perform their treaty undertakings in good faith.²⁴ *Pacta sunt servanda* is an omnipresent rule of customary international law, binding all states and all treaties made.

Therefore, to interpret Article III.1 of the NPT as comprising an operative legal obligation would be to make its provisions redundant with the obligation clearly spelled out in Article III.4. Furthermore, to interpret Article III.1's terms as containing an obligation to comply with the terms of another treaty (a safeguards agreement) would render the terms of Article III.1 redundant and superfluous in light of the rule of *pacta sunt servanda*. An interpretation of a treaty which renders some of its terms redundant or superfluous internally, or redundant with regard to other system rules of international law, is to be avoided.²⁵

The terms of Article III.1 are better interpreted in their context within Article III as describing, along with Article III.2 and Article III.3, the sort of safeguards agreement which NNWS are to enter into with the IAEA. Under this interpretation, Article III makes sense holistically, and redundancy is avoided. Paragraphs 1–3 of Article III lay out in detail the type of safeguards agreement which paragraph 4 requires NNWS to enter into with the IAEA. Indeed this is precisely what the terms of Article III.4 provide: 'Non-nuclear-weapon States Party to the Treaty shall conclude agreements with the International Atomic Energy Agency to meet the requirements of this Article.'²⁶

Interpreted correctly, then, it is clear that the operative obligation in Article III.4 for NNWS to enter into a safeguards agreement with the IAEA, of a type described in Article III(1–3), is the extent of the legal relationship between the NPT on the one hand, and the IAEA and its safeguards agreements with states on the other.

If a state enters into a safeguards agreement with the IAEA, it accepts the IAEA's role in monitoring its compliance with its safeguards agreement, as detailed in Article XII of the IAEA Statute. As Article XII makes clear, the IAEA

²⁴ See VCLT Article 26; *Gabčíkovo-Nagymaros Project* (Hung. v. Slov.), ICJ Reports, 1997, p. 7, para. 114.

²⁵ See Ulf Linderfalk, *On the Interpretation of Treaties: The Modern International Law as Expressed in the 1969 Vienna Convention on the Law of Treaties* (2007) pp. 109–110.

²⁶ Emphasis added.

has the authority to determine that a state party to a safeguards agreement is in noncompliance with that agreement. Noncompliance with a safeguards agreement is reported in the first instance by the IAEA's inspectors, whose job it is to verify the state's disclosures and accounting of the nuclear materials and activities occurring within its borders. If the IAEA inspectors report noncompliance with the terms of a safeguards agreement, Article XII(c) of the IAEA Statute details the IAEA's responsibilities and procedural options. The report on noncompliance is to be transmitted to the Director General, who will also transmit it to the IAEA Board of Governors. At this point, the Board 'shall call upon the recipient State or States to remedy forthwith any non-compliance which it finds to have occurred.' The Board shall also report the noncompliance to all IAEA members and to the U.N. Security Council and General Assembly.

If the state fails to take 'fully corrective action within a reasonable time,' the Board may take one or both of the following measures: (1) it may curtail or suspend all assistance being provided to the state by the IAEA and demand a return of assistance materials; (2) it may also act under Article XIX of the Statute and suspend the state from IAEA membership and privileges.

An interesting legal question concerns the juridical meaning of a determination of safeguards agreement noncompliance by the IAEA. Is the determination of noncompliance by the IAEA equivalent to or constitutive of a finding of material breach by the state party to the agreement, pursuant to the definition of material breach contained in VCLT Article 60? Or is it merely a preliminary finding of noncompliance that does not, *per se*, constitute a determination of material breach?²⁷ This is essentially a question of the role and authority of the IAEA. And this in turn becomes a fundamental question of the international legal personality of the IAEA as an international organization. And the question is whether the IAEA's international legal personality includes the authority to make a determination of material breach of safeguards agreements to which it is a party, which is an essentially judicial and not a political role.

Determining the international legal personality of an international organization is essentially a determination, made through a review of the organization's constituting instruments, of the intent of the states that created the organization. With what attributes of legal personality did the state creators of the organization intend to endow it? The practice of the organization subsequent to its founding, and the acceptance or rejection of this practice by their member states as well as non-member states, can also contribute to the contours of the organization's personality attributes.²⁸

²⁷ See generally Martti Koskenniemi, 'Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol,' Yearbook of International Environmental Law, Vol. 3 (1992) p. 123; Bruno Simma and Dirk Pulkowski, 'Of Planets and the Universe: Self-Contained Regimes in International Law,' 17 *European Journal of International Law* (2006) 483, 488–489.

²⁸ See Ian Brownlie, *Principles of Public International Law* (7th edn, 2008) p. 675; *Reparation* case, ICJ Reports, 1949, p. 174.

In the case of the IAEA, a review of its constituting instrument, the IAEA Statute, yields compelling evidence that the IAEA was not intended by its creators to exercise a judicial role. Rather, it was to perform a technical role of verifying the disclosures and accounting of nuclear materials and activities occurring within the boundaries of states that entered into safeguards agreements with the organization. A finding of noncompliance with an IAEA safeguards agreement can be based upon quite technical disclosure or accounting lapses.²⁹ Indeed, pursuant to paragraph 19 of INFCIRC/153 (the agency's standard comprehensive safeguards agreement), the IAEA Board of Governors may refer states to the U.N. Security Council for enforcement action upon the simple finding that Agency inspectors are 'not able to verify that there has been no diversion of nuclear material required to be safeguarded under the Agreement to nuclear weapons or other nuclear explosive devices.' And the IAEA's inspectors are highly capable and qualified in their training to make such technical determinations. These determinations are important in that they can be probative in alerting the IAEA Board of Governors and the U.N. Security Council to diversions of declared fissile materials and technologies to military uses.

However, the standards for determining technical noncompliance detailed in the IAEA Statute do not satisfactorily correlate to the standard for determining material breach, contained in VCLT Article 60, nor do they purport to. Material breach is defined in the VCLT as '(a) a repudiation of the treaty not sanctioned by the present Convention; or (b) the violation of a provision essential to the accomplishment of the object or purpose of the treaty.'

Quite the opposite, the IAEA Statute in Article XVII is explicit in its direction to the organization on steps to be taken in the event of 'any question or dispute concerning the interpretation or application of this Statute which is not settled by negotiation [...]'. The organization is directed to refer all such legal questions to a proper judicial forum—the International Court of Justice. Article XVII further mandates the IAEA governing bodies to request an advisory opinion from the ICJ 'on any legal question arising within the scope of the Agency's activities.' These provisions, manifesting the intent of the creators of the IAEA, are incongruous with an interpretation that the IAEA itself possesses a judicial role and authority, including the authority to determine a material breach of IAEA safeguards agreements.

Furthermore, one must remember that IAEA safeguards agreements are bilateral treaties between the IAEA, in its exercise of legal personality explicitly granted to it by the IAEA Statute, and a state. The proposition that the IAEA itself can determine in authoritative fashion that the other party to a bilateral

²⁹ See Pierre Goldschmidt, 'Exposing Nuclear Non-Compliance,' 51(1) *Survival* (February 2009) 143; John Carlson, 'Defining Noncompliance: NPT Safeguards Agreements,' 39(4) *Arms Control Today* (May 2009) 22.

treaty, to which it itself is the other member, is in breach of its obligations under that treaty, has no precedent or analogue in international law.

The better interpretation of the IAEA's international legal personality, and its mandate with regard to determining compliance with safeguards agreements, is that an IAEA determination that a state is in noncompliance with its safeguards agreement constitutes a preliminary technical determination of noncompliance short of an allegation or finding of material breach. As Article XII of the IAEA Statute stipulates, such a finding triggers reporting requirements for the IAEA, but it also marks the beginning of a diplomatic process through which the IAEA is to work with the state to bring its actions—which again may consist of no more than reporting or accounting errors or omissions—into full compliance with the obligations of its safeguards agreement. It is only if the noncompliant state fails to take corrective action within a reasonable time that the IAEA may proceed to suspend its assistance from the organization, or ultimately to suspend its IAEA membership and privileges, pursuant to the process detailed in Article XIX.

Rather than interpreting the first finding of noncompliance as a treaty breach, it would be more correct to interpret only such a suspension pursuant to Article XIX as constituting an allegation (not a finding) by the IAEA that the other party to a bilateral treaty to which it is also a party, is in material breach of its obligations under that treaty. Such an interpretation would be consonant, and in fact in perfect harmony, with the presumptive rules on termination or suspension of a treaty as a consequence of breach, contained in VCLT Article 60. Article 60 provides that only a 'material breach of a bilateral treaty by one of the parties entitles the other to invoke the breach as a ground for terminating the treaty or suspending its operation in whole or in part.' The first finding, or subsequent findings of safeguards agreement noncompliance by the IAEA short of a finding triggering the procedures for suspension in Article XIX, should not therefore be interpreted as constituting an allegation of a material breach of the safeguards agreement. Only a determination of noncompliance which results in the IAEA's suspension of the membership of the noncompliant state under Article XIX, mirroring the remedy provided for in VCLT Article 60(1), should be interpreted as such an allegation of a material breach.

Under this interpretation, a determination by the IAEA that a state is in noncompliance with its safeguards agreement is not *per se* equivalent to or constitutive of a determination of material breach of the safeguards agreement. The IAEA simply does not have the legal personality under its statute to exercise such a judicial function. A determination of safeguards agreement noncompliance by the IAEA is better interpreted as comprising a preliminary technical finding of treaty noncompliance, short of material breach, which results in explicitly detailed rights and responsibilities of the IAEA under Article XII of its Statute.

Returning, therefore, to NPT Article III, I have demonstrated through this analysis that an IAEA determination of safeguards noncompliance does not per se constitute a

determination of a material breach of the safeguards agreement. However, even if it did, this would not result in or constitute a breach of NPT Article III. This is because, as I have explained, the operative obligation in Article III is contained in Article III.4 and consists only in an obligation for NNWS to enter into a safeguards agreement with the IAEA, of a type described in Article III(1–3).

I have thus demonstrated that the second interpretive pillar of the transitive sequence identified above—that noncompliance with an IAEA safeguards agreement constitutes a breach of NPT Article III—is incorrect, as is the first interpretive pillar of the transitive sequence—the interpretation of a conditional linkage between Article III and Article IV. The rhetorical blurring and conflation by NWS officials during the target era of the concepts of noncompliance with an IAEA safeguards agreement, and violation of Article III of the NPT, and the resulting claim that NNWS in noncompliance with their safeguards agreement were not entitled to their Article IV(1) right to nuclear peaceful use, was all therefore simply incorrect treaty interpretation.

This conclusion does beg the following questions: How then can a breach of NPT Article III be established? What entity is authorized to make this determination? What are the legal implications or consequences of such a determination? Under the interpretation of Article III maintained herein, a breach of NPT Article III can be established if an NNWS party either fails to conclude a safeguards agreement with the IAEA, or is determined by a competent judicial authority to have materially breached a safeguards agreement, pursuant to the definition of material breach in VCLT Article 60. The other logical means of breach would be termination of or withdrawal from a safeguards agreement with the IAEA. However, the standard INFCIRC/153 safeguards agreement does not provide for termination/withdrawal in its terms. Therefore any renunciation of a safeguards agreement by an NNWS party would fall under the definition of material breach contained in VCLT Article 60.

As for who has the authority to determine a breach of Article III, the NPT is no different in this context than any other treaty. There is no specialized judicial body within the NPT normative system, inclusive of the IAEA, that has authority to determine a breach of NPT Article III. Therefore only an international judicial body with appropriate jurisdiction can perform this essentially judicial role. The NPT does not contain a provision explicitly submitting parties to the jurisdiction of the International Court of Justice for legal questions arising under the treaty, as many treaties do. Therefore, jurisdiction for the ICJ to hear a dispute arising under the NPT must be obtained through other means, detailed in the ICJ's Statute.³⁰

In the event that a properly seized international judicial body were to determine that an NNWS party to the NPT had in fact breached NPT Article III, there would of course be legal implications for the breaching party as well as for the

³⁰ For more on ICJ jurisdiction in the context of non-proliferation treaties, see Daniel H. Joyner, *International Law and the Proliferation of Weapons of Mass Destruction* (2009) ch 5.

other parties to this multilateral treaty. The rights of the other parties of the NPT in the event of a material breach (if indeed a breach of NPT Article III were determined by the court to constitute a material breach of the NPT) by one party are laid out in detail in VCLT Article 60. As for the breaching party itself, it would be liable under any judgment for damages imposed by the court. However, in terms of the NPT itself and the continuing applicability of the rest of its provisions to the breaching NNWS, there would be no *per se* legal implication flowing from the breach of Article III. There would be no inherent conditionality with Article IV, as concluded herein. As a *de facto* matter, however, a state found to be in breach of Article III—if that breach were determined by the court to be a material breach of the treaty—would no doubt find many if not all of the other NPT parties exercising their rights under VCLT Article 60 to suspend the operation of the treaty as between themselves and the breaching state. This would have the practical effect of nullifying the terms of the NPT with respect to the breaching state.

D. Proposals and efforts to circumscribe the Article IV(1) inalienable right

I have so far demonstrated that the legal interpretive arguments which were employed by NWS during the target era to justify the proposals and efforts discussed in Chapter 3 for circumscribing the inalienable right recognized in Article IV(1)—the requirement of fuel bank membership, IAEA Additional Protocol adoption, and IAEA safeguards agreement compliance as conditions of supply—were fundamentally erroneous. As I stated in the introduction to this chapter, these interpretive errors are at their shared core the result of NWS officials disproportionately prioritizing the non-proliferation pillar of the NPT and incorrectly marginalizing the peaceful use pillar of the NPT, and in so doing failing to interpret the provisions of the NPT in their proper context and in the light of the treaty's correctly understood object and purpose.

In fact, in light of the correct interpretation given herein, these proposals and efforts were actions in unlawful circumscription of the right of NNWS to peaceful nuclear activities in Article IV(1) as properly understood. Each of these proposals and efforts, inasmuch as action was taken in pursuance of them, were manifestations of non-recognition of the full and proper scope of this inalienable right, and effected a prevention of trade which should have been allowed between private entities in NWS, and NNWS developing states, in exercise of their right to peaceful use of nuclear materials and technologies. These actions were therefore illegally prejudicial of the legitimate legal interests of NNWS under the grand bargain of the NPT.

These actions were arguably also in breach of the Article IV(2) obligation upon supplier states, who are therein obligated to 'cooperate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially

in the territories of non-nuclear-weapon States Party to the Treaty.' I will not provide herein a full legal analysis of Article IV(2), though I have done so elsewhere.³¹ It will suffice here to say that through their actions which they justified on the basis of the erroneous legal interpretations herein examined, NWS and other supplier states unjustifiably denied nuclear supply to NNWS, and were thus likely in breach of their obligation of nuclear cooperation in NPT Article IV(2) during the target era.

With regard to the proposals and efforts of NWS to make fuel bank membership, IAEA Additional Protocol adoption, and safeguards agreement compliance conditions of supply, these proposals are best seen as attempts by NWS to essentially rewrite the terms of NPT Article IV in a much more restrictive way for NNWS parties than originally written. In essence it is an attempt by a relatively small group of developed, nuclear-weapon-possessing states to restructure the grand bargain of the NPT by pressuring developing NNWS to make further concessions in the area of peaceful use than those to which they originally agreed. Procedurally, this is of course invalid, as the NPT contains provisions on modification in Article VIII which have not been followed in this context.

More substantively, the problem with such efforts to rewrite the terms of the NPT for one set of parties (NNWS), but not for other parties (NWS), is analogously comparable to the domestic contracting context in which one party seeks to amend the terms of an existing contract to its advantage, and to persuade the other party to the contract to recognize those changes, even when there is no consideration flowing to the other party in the form of changed contractual provisions sought by that other party. In the common law tradition, such contractual amendments are generally forbidden by reference to the pre-existing duty rule, which states that a contract modification in which any party offers for consideration only that which they are already under contractual obligation to do, is void for want of consideration.³² There is of course no requirement of consideration in treaty law, and I offer this domestic law reference only as a principled analogy to demonstrate the inequity of attempts to amend an agreement between two parties, or sets of parties, to benefit only one of them and cost only the other.

III. Disarmament

As reviewed in Chapter 3, during the target era NWS officials consistently marginalized the importance of the disarmament pillar of the NPT, codified in Article VI. They adopted a uniformly obfuscatory interpretive stance on the obligation contained in Article VI, and on the rare occasions when they did interpret the

³¹ See Daniel H. Joyner, *International Law and the Proliferation of Weapons of Mass Destruction* (2009) ch 1.

³² See E. Allan Farnsworth, *Contracts* (4th edn, 2004) p. 267.

terms of Article VI in some detail they maintained an interpretation which held that the Article VI obligation is one of very limited scope—in some cases approaching non-existence. This interpretation was most clearly expressed in the speeches and writings of U.S. representative Christopher Ford, who argued that the only legal obligation for NWS in Article VI is the minimal obligation to put forth good faith effort toward negotiations on disarmament.

The analysis given in both the non-proliferation and peaceful use sections of this chapter, recalling the conclusions reached in Chapter 2 regarding the context and object and purpose of the NPT, and in particular the principle of the juridical equality of the three pillars of the NPT which flowed from that analysis, applies with equal force to this undue marginalization by NWS of the disarmament pillar of the NPT. Disproportionate prioritization of the non-proliferation pillar of the NPT at the expense of the disarmament pillar of the NPT in NWS policy positions, led NWS to interpretive conclusions regarding the scope and meaning of NPT Article VI which were in disharmony with the plain meaning of the terms of Article VI as understood within the provision's proper context, and in the light of the NPT's correctly understood object and purpose.

As noted above, U.S. representative Christopher Ford was the most candid and thorough among NWS officials in declaring his interpretation of NPT Article VI, which interpretation was reflected in his official statements. In his 2007 article in the *Non-proliferation Review*, Ford argues for the limited interpretation of Article VI discussed above. He challenges the ICJ's 1996 Advisory Opinion head on and declares its 'twofold obligation' conclusion—and particularly the Court's conclusion that Article VI contains an 'obligation to achieve a precise result—nuclear disarmament in all its aspects'—to be erroneous. Rather, Ford looks to one paragraph in the preamble of the NPT, and to selected vignettes from the negotiating history of Article VI, to draw his interpretive conclusion of the minimalist obligation of Article VI.³³

To give credit where it is due, Ford is right to challenge the interpretation of NPT Article VI adopted by the ICJ in its 1996 Advisory Opinion. In this section of the Court's opinion, the Court is not particularly methodical in its interpretive analysis, as it is in other sections of its opinion. Its interpretive conclusion regarding the scope and meaning of NPT Article VI is therefore rather brief and conclusory. The Court's consideration of Article VI occurs at the very end of the opinion, and is not directly connected to its conclusions regarding the question put to it. This fact leads Ford to suggest that the Court's consideration of NPT Article VI was *ultra vires* the Court's authority. However, as the Court itself states in paragraph 98 of its Opinion, the applicability of this consideration to the

³³ Christopher A. Ford, 'Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,' 14(3) *Non-proliferation Review* (November 2007), *Advisory Opinion on the Threat or Use of Nuclear Weapons*, ICJ Reports, 1996, p. 26.

question placed before the Court does appear legitimate when the question is 'seen in a broader context.' The questions of use of nuclear weapons and possession of nuclear weapons are, after all, inherently linked—one cannot use what one does not have.

Germane though the Court's consideration may be, with respect to the Court's substantive interpretation of Article VI and its finding in this provision an obligation on all NPT parties to achieve the result of nuclear disarmament, Ford is correct to argue that the Court almost certainly did stretch the meaning of the terms of Article VI past their plain meaning. Conversely, however, the extremely limited interpretation of the Article VI obligation which Ford advances in place of the Court's, almost certainly does not give the plain meaning of the terms of Article VI its full extent of scope and meaning.

Article VI states, in its entirety:

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

Reading the terms of Article VI in their context within the article itself, we find an obligation 'to pursue negotiations in good faith on effective measures relating to [...] and then a delineation of three results to which the effective measures spoken of should relate. These are:

1. cessation of the nuclear arms race at an early date;
2. nuclear disarmament; and
3. a treaty on general and complete disarmament under strict and effective international control.

The undertaking, or obligation, in Article VI is thus an obligation to pursue negotiations in good faith on effective measures relating to these three delineated end results. In his interpretive analysis, Ford places his focus on the term 'pursue.' He argues that this term cannot be said to comprise an obligation on NPT Parties to do anything other than to put forth good faith effort toward negotiations, as it inherently comprehends the fact that negotiations by definition involve more than one party, with the result that because negotiations are not within the control of any one state, no one state can be held liable for their not coming to pass.

But here I think Ford undervalues, or at least understates, the scope of individual accountability which the legal principle of 'good faith' in Article IV imposes upon each state party to the NPT. Again, the obligation is to pursue negotiations in good faith on effective measures related to the three delineated results. As the ICJ states in paragraph 102 of its 1996 Advisory Opinion, the principle of good faith is a long-established principle of international law with a justifiable legal meaning in the context of the creation and performance of legal

obligations. It is a principle which has been frequently employed by the ICJ in its jurisprudence.³⁴

In the context of NPT Article VI, each state party undertakes individually to pursue negotiations in good faith on effective measures related to the three delineated results. Ford makes much of the distinction between an obligation to pursue negotiations in good faith, and a counterfactual obligation to engage in negotiations in good faith.³⁵ To him, the term 'pursue negotiations' is somehow diluted in its obligatory scope as compared to the counterfactual term 'engage in negotiations.' I see much less of a distinction here than Ford does. Ford argues that the word 'pursue' is an important indication of the intent of the Article's drafters to acknowledge that negotiations may fail to commence or to produce an outcome, through no fault of one or a number of parties who are pursuing the commencement of negotiations in good faith. If, however, counterfactually the term employed in Article VI was 'engage in negotiations,' would the obligation thus phrased not admit of the same possibilities? And as Ford himself argues, an obligation to engage in negotiations would in some sense be logically inappropriate, as it would be inequitable to hold a state acting in good faith, and willing to negotiate, liable for the failure of negotiations to take place due to the acts of another state either not acting in good faith or otherwise unwilling to negotiate. Thus, the drafters of Article VI could not logically have constructed the term as an obligation to engage in negotiations, and the obligation to pursue negotiations in good faith was therefore the strongest phrasing logically left to them. A similar phrasing occurs, for example, in Article 33 of the United Nations Charter, which obligates all member states of the United Nations to 'seek a

³⁴ See generally David Koplow, 'Parsing Good Faith: Has the United States Violated Article VI of the Nuclear Non-Proliferation Treaty?' 1993 *Wisconsin Law Review* (2003) 301; UK Trident Replacement a 'Material Breach' of the NPT, Joint Opinion by Rabiner Singh QC and Professor Christine Chinkin, December 19, 2005, para. 69.

The Treaty obligation is thus not to disarm as such, but a positive obligation to pursue in good faith negotiations towards these ends, and to bring them to a conclusion. Good faith is the legal requirement for the process of carrying out of an existing obligation. In the *Nuclear Tests* cases the ICJ described the principle of good faith as 'one of the basic principles governing the creation and performance of legal obligations' [...]. The obligation of good faith has been described as not being one 'which obviously requires actual damage. Instead its violation may be demonstrated by acts and failures to act which, taken together, render the fulfilment of specific treaty obligations remote or impossible.' In the context of an obligation to negotiate in good faith this would involve taking no action that would make a successful outcome impossible or unlikely [...].

quoting *Nuclear Tests cases Australia v. France; New Zealand v. France*, ICJ Reports, 1974, p. 253; p. 457, para. 46; and Guy Goodwin-Gill, 'State Responsibility and the "Good Faith" Obligation in International Law', in M. Fitzmaurice and D. Sarsoshi, eds, *Issues of State Responsibility before International Judicial Institutions* (2004) pp. 75, 84. See also 'Good Faith Negotiations Leading to the Total Elimination of Nuclear Weapons', Legal Memorandum by the International Association of Lawyers Against Nuclear Arms and the International Human Rights Clinic at Harvard Law School (2009) ch 7. Available at <<http://icnp.org/disarmament/2009.05.ICJbooklet.pdf>>.

³⁵ Christopher A. Ford, 'Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons', 14(3) *Non-proliferation Review* (November 2007) 403.

solution by negotiation [...] to any dispute which endangers the maintenance of international peace and security.

If anything, it would appear that an obligation to pursue negotiations in good faith imposes an obligation of broader scope upon each state party than would an obligation merely to engage in negotiations in good faith, as it seems to reach to the pre-negotiation stage of diplomatic relations and impose the obligations of good faith not only upon the negotiations themselves once commenced, but also upon their active pursuit by each individual state party. Thus, I read the obligation to pursue negotiations in good faith not as a manifestation of intent of the drafters of Article VI to dilute or attenuate the obligation upon each individual NPT party, but rather by its plain meaning to comprise an obligation to proactively, diligently, sincerely, and consistently pursue good faith negotiations on effective measures relating to the three delineated results.³⁶

The obligation to pursue negotiations in good faith contained in Article VI must be understood in its holistic entirety. It is not an obligation to pursue negotiations in good faith on effective measures relating to arms control or nuclear weapons regulation generally. It is a specifically phrased obligation to pursue negotiations in good faith on effective measures related to (1) cessation of the nuclear arms race at an early date, (2) nuclear disarmament, and (3) a treaty on general and complete disarmament. Reading the entirety of the provision thus provides further meaning to the obligation to pursue negotiations in good faith. The delineated results, to which the effective measures should relate, provide meaning to the kind of negotiations which NPT parties are obligated to pursue.

So, in Article VI each party to the NPT is under an individual obligation to pursue in good faith—i.e. proactively, diligently, sincerely, and consistently—negotiations in good faith on the specific subject of effective measures relating to the three delineated results.

Regarding the three specific results, Ford and other NWS officials have argued that there is a sequencing, or conditionality, implied by the terms and order of the delineation of these results, which serves to invalidate any argument that NWS are obligated to pursue negotiations in good faith on effective measures related to nuclear disarmament before the conclusion of a treaty on general and complete disarmament. Reading Article VI of the NPT itself, it is difficult to see any basis

³⁶ See, e.g., *Gabcikovo-Nagymaros Dam Project*, (Hungary v. Slovakia), ICJ Reports, 1997, p. 7, at para. 142, where the court held: 'What is required in the present case by the rule *pacta sunt servanda*, as reflected in Article 26 of the Vienna Convention of 1969 on the Law of Treaties, is that the Parties find an agreed solution within the cooperative context of the Treaty. Article 26 combines two elements, which are of equal importance. It provides that "Every treaty in force is binding upon the parties to it and must be performed by them in good faith." This latter element, in the Court's view, implies that, in this case, it is the purpose of the Treaty, and the intentions of the parties in concluding it, which should prevail over its literal application. The principle of good faith obliges the Parties to apply it in a reasonable way and in such a manner that its purpose can be realized.'

in its terms for such an interpretation. And indeed, this interpretation by Ford and others is not based on the text of Article VI. Rather, it is based *solely* on a reading of one paragraph taken from the preamble of the NPT which reads:

The States concluding this Treaty, hereinafter referred to as the 'Parties to the Treaty' [...] Desiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery pursuant to a Treaty on general and complete disarmament under strict and effective international control [...]

Here, Ford places emphasis on the phrase 'the elimination from national arsenals of nuclear weapons and the means of their delivery *pursuant to a Treaty on general and complete disarmament* [...]'.³⁷ This preamble paragraph, Ford argues, is an important context for the obligation in Article VI, and should imbue its terms with meaning.³⁸

Firstly, as discussed in Chapter 2, the primary utility of the preamble of a treaty for interpretive purposes is its role in determining the object and purpose of the treaty. Provisions of a treaty may be read along with relevant sections of the preamble in order to clarify or add meaning where a provision or its terms are lacking in meaning. However, the preamble cannot be used to contradict the plain meaning of the terms of a treaty provision. This is precisely what Ford's interpretation of conditionality, using the preamble as his sole source of interpretation, would do.

Again viewing the actual text of Article VI, the obligation is to pursue negotiations in good faith on effective measures 'relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.' There is no hint in the terms of this paragraph of any conditionality or prerequisite ordering of the type Ford argues for. Indeed, the plain meaning of the terms of Article VI, in their full context within the other provisions of the NPT, and in light of the object and purpose of the treaty, is quite clear and logically rendered. States are to pursue negotiations in good faith on effective measures relating to three delineated results. These results are listed in a perfectly logical sequential fashion. The first result to be the subject of negotiated effective measures is the cessation of the nuclear arms race. By any reasonable calculus, this result was accomplished by the ending of the Cold War and the dissolution of the Soviet Union, and the accomplishments in nuclear arms control which have occurred in the past twenty years. The second result to be the subject of negotiated effective measures is nuclear disarmament. As Randy Rydell and others have written, and

as simple logic dictates, nuclear disarmament is a lesser included concept and goal within the larger concept and goal of general and complete disarmament. Effective partial measures toward general and complete disarmament, one of which is nuclear disarmament, have long been understood to be prudently pursued concurrently with, and as a necessary part of, efforts toward the larger comprehensive goal.³⁹

Employing the more sound interpretive method provided for in VCLT Article 31(3)(a), reference can be made to the subsequent interpretive agreements reached between the parties to the NPT, reflected in Review Conference final documents. In the 2000 Review Conference Final Document, NPT parties by consensus agreed upon a statement of thirteen 'practical steps for the systematic and progressive efforts to implement Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons [...]'. Among the thirteen steps thus agreed upon are the ratification of the Comprehensive Test Ban Treaty, the conclusion of the Fissile Material Cut-off Treaty, the principle of irreversibility to apply to nuclear disarmament, and a host of other disarmament measures including the conclusion of all the START II and III agreements, 'the engagement as soon as appropriate of all the nuclear-weapon States in the process leading to the total elimination of their nuclear weapons,' and 'an unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament to which all States parties are committed under Article VI.'

It is only after all of these practical steps related directly to nuclear disarmament, which the conference agreed upon for the implementation of Article VI, that the following is included as practical step number eleven: 'Reaffirmation that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control.' This sequencing in the 2000 Review Conference Final Document mirrors precisely the sequencing in Article VI itself.

*There is simply no sound interpretive reason not to, and very sound interpretive reasons to read Article VI precisely as its terms and their logical sequencing dictate—that each NPT party is currently under an individual obligation to pursue negotiations in good faith on effective measures related to nuclear disarmament.*⁴⁰ They are

³⁹ See Randy Rydell, 'Nuclear Disarmament and General and Complete Disarmament,' in David Krieger, ed., *The Challenge of Abolishing Nuclear Weapons* (2009). See also George Bunn and Roland Timmerbaev, 'Nuclear Disarmament: How Much Have the Five Nuclear Powers Promised in the Non-Proliferation Treaty?' in John Rhineland and Adam Scheinman, eds., *At the Nuclear Crossroads* (1995).

⁴⁰ See George Bunn and Roland Timmerbaev, 'Nuclear Disarmament: How Much Have the Five Nuclear Powers Promised in the Non-Proliferation Treaty?' in John Rhineland and Adam Scheinman, eds., *At the Nuclear Crossroads* (1995) p. 29.

But the plain meaning of Article VI, its negotiating history, and the parties' practice in implementing it all suggest that these pre-conditions do not need to be satisfied to trigger an obligation to negotiate in good faith toward zero nuclear weapons along the 'nuclear disarmament' route. After 25 years and an end to the Cold War, the time has been reached when Article VI requires all five

³⁷ Emphasis added.

³⁸ Christopher A. Ford, 'Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,' 14(3) *Non-proliferation Review* (November 2007) 403.

also under an individual obligation to pursue negotiations in good faith on effective measures relating to a treaty on general and complete disarmament (GCD). These are separate obligations with no conditionality or sequencing legally connecting them. Indeed, the only sequencing implied by the terms of Article VI itself, and reflected in the thirteen practical steps adopted by NPT parties in the 2000 Review Conference Final Document, is the opposite sequence to that argued for by Ford. In the text of Article VI, nuclear disarmament is mentioned as a result prior to the mentioning of a GCD treaty as a result, and again is a logical lesser included concept which would most reasonably be accomplished before the accomplishment of a negotiated GCD treaty.

So what does it mean to pursue negotiations in good faith on effective measures relating to nuclear disarmament? As discussed above in Chapter 3, nuclear disarmament is a term of art which has a meaning distinct from other related terms, including the term arms control. These two terms—arms control and disarmament—are often used interchangeably in discourse concerning nuclear weapons, but they are in fact quite different concepts. Again as discussed above, arms control efforts are efforts which seek and which are designed by policy to effect a limitation or reduction of their subject weapons technologies, but which do not intend nor are designed by policy to achieve complete elimination of those weapons. Arms control efforts are typically designed to decrease the cost and risk associated with stockpiling of weapons, but they maintain a conception of the continued presence of those weapons in military arsenals. They are not part of a policy program the object of which is the elimination of their subject weapons from national arsenals.

Disarmament efforts, on the other hand, are part of such a policy program whose stated object is the complete elimination of their subject weapons from national arsenals, even if that program is to be implemented through multiple, progressive steps. Thus, while arms control efforts and disarmament efforts may look similar, in that the short-term aim of both is to limit and reduce their subject weapons technologies, they are in fact quite different in that disarmament efforts are clearly framed within a policy program the object of which is complete elimination from national arsenals.

Thus, the obligation in NPT Article VI to pursue negotiations in good faith of effective measures relating to nuclear disarmament takes on meaning and scope from this definition of the term 'nuclear disarmament' as distinct from, *inter alia*, the term 'nuclear arms control'. *Effective measures relating to nuclear disarmament*

nuclear-weapon states to begin such talks. Article VI does not say whether negotiating toward zero means taking one step downward after another through one negotiation after another, or a 'phased programme' involving a package of steps agreed in one long negotiation. At the same time, Article VI does not authorize an avoidance of negotiations by any of the five just because the Americans and Russians have agreed to reduce to 3,500 strategic warheads. Indeed, all five nuclear powers have a present, pressing obligation to begin discussing proposals for moving in the direction of zero along one route or the other.

can therefore be interpreted as effective measures relating to the complete elimination of nuclear weapons from national arsenals, or at the least to effective measures which are part of a policy program whose stated object is the complete elimination of nuclear weapons from national arsenals, through progressive programmatic steps.⁴¹ Article VI therefore obligates all NPT parties to pursue negotiations in good faith specifically on such effective measures.

Finally, when the negotiations referred to in Article VI do occur, the jurisprudence of the International Court of Justice and other international tribunals gives some illumination to the legal implications of the concept of good faith on such negotiations. In a word, negotiations pursued in good faith must be *meaningful*. In explaining the rules of law which applied principles of equity, including the principle of good faith, to the case of parties negotiating the delimitation of adjacent continental shelves, the ICJ stated in the 1969 *North Sea Continental Shelf* case that:

[t]he parties are under an obligation to enter into negotiations with a view to arriving at an agreement, and not merely to go through a formal process of negotiation as a sort of prior condition for the automatic application of a certain method of delimitation in the absence of agreement; they are under an obligation so to conduct themselves that the negotiations are meaningful, which will not be the case when either of them insists upon its own position without contemplating any modification of it.⁴²

As the arbitral panel held in the *Lake Lanoux* arbitration of 1957, an obligation to seek agreement through negotiation can be breached, *inter alia*:

[...] in the event, for example, of an unjustified breaking off of the discussions, abnormal delays, disregard of the agreed procedures, systematic refusals to take into consideration adverse proposals or interests [...]⁴³

Similarly, in the 1982 *Kuwait v. Aminoil* arbitration, the tribunal held that:

[a] scrutiny of the negotiations fails to reveal any conduct on either side that would constitute a shortcoming in respect of [...] the general principles that ought to be observed in carrying out an obligation to negotiate—that is to say, good faith as properly to be understood: sustained upkeep of the negotiations over a period appropriate to the circumstances; awareness of the interests of the other party; and a persevering quest for an acceptable compromise.⁴⁴

So, bringing all of these interpretive threads together, we can in summary interpret NPT Article VI to contain an individual legal obligation binding upon all NPT

⁴¹ See George Bunn and Roland Timerbaev, 'Nuclear Disarmament: How Much Have the Five Nuclear Powers Promised in the Non-Proliferation Treaty?' in John Rhineland and Adam Scheinman, eds, *At the Nuclear Crossroads* (1995) p. 13 ('"Disarmament" can sometimes mean reductions short of zero. However, the ordinary meaning of "nuclear disarmament" clearly includes zero even if it also includes reductions short of zero. Therefore, the obligation to negotiate measures "relating to [...]" nuclear disarmament" seems to include, among other things, zero.')

⁴² (F.R.G. v. Den.; F.R.G. v. Neth.), ICJ Reports, 1969, p. 47, at para. 85.

⁴³ 24 I.L.R. 101, 128 (1957). ⁴⁴ 66 I.L.R. 519, 578 (1982).

parties, to proactively, diligently, sincerely, and consistently pursue meaningful negotiations on effective measures relating to the complete elimination of nuclear weapons from national arsenals, or at the least on effective measures which are part of a policy program whose stated object is the complete elimination of nuclear weapons from national arsenals, through progressive programmatic steps.

Having reached this interpretation of NPT Article VI, we can now proceed to consider the question of NWS compliance specifically with the Article VI obligation to pursue negotiations in good faith on effective measures relating to nuclear disarmament. As discussed in Chapter 3 above, during the target era NWS officials consistently argued that their accomplishments in reducing the number of nuclear warheads on operational readiness within their arsenals, through unilateral action and pursuant to bilateral agreements, in and of themselves constituted sufficient evidence of their progressive compliance with the obligations of NPT Article VI.

Right away, by reference to the interpretation of the Article VI obligation relating to nuclear disarmament reached herein, these oft-repeated arguments of compliance by NWS officials can be dismissed as erroneous. Evidence of arms control agreements and actions taken pursuant thereto, or of actions taken on a unilateral basis, to reduce the number of nuclear warheads in the national arsenals of NWS, without evidence (of which there is none) of negotiated national and/or international policy programs of nuclear disarmament of which such agreements and actions were a progressive part, is not alone sufficient to evidence compliance with the Article VI obligation relating to nuclear disarmament.⁴⁵ Thus, the primary arguments of NWS officials during the target era proffering evidence of NWS compliance with the obligations of Article VI can, unfortunately, be quickly dismissed as erroneous and obfuscatory.

However, this conclusion does not *per se* preclude a finding of NWS compliance with the Article VI obligation related to nuclear disarmament, as correctly interpreted. The question of whether there has been in the practice of the NWS the pursuit of negotiations in good faith on effective measures relating to nuclear disarmament, as properly interpreted, can be answered in two alternative ways. One way of answering this question is in the affirmative. The text of NPT Article VI does not specify a particular forum or mode for the pursuit of such negotiations. However, in Article VIII(3) the NPT does explicitly provide for the holding once every five years of NPT treaty review conferences, to be attended by all treaty parties. These review conferences are tasked in Article VIII(3) 'to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized.' Thus, NPT review

conferences would seem to be at least one natural forum whereat negotiations might be held, and agreement on effective measures relating to nuclear disarmament might be reached among NPT parties.

As has been noted previously, many but not all NPT review conferences have produced final documents, which are adopted by the consensus of the parties in attendance. There has been some debate over the juridical meaning and significance of these final documents. It is certainly true that different provisions in the text of these final documents may carry different juridical value. Thus, in the final documents the conference may simply 'note' or 'welcome' the existence of facts or developments. It may alternatively 'reaffirm' statements or principles. Such provisions are likely limited in their juridical or interpretive value. However, as the VCLT makes clear in Article 31(3), 'subsequent agreement[s] between the parties regarding the interpretation of the treaty or the application of its provisions,' may be 'taken into account, together with the context' of the treaty in authoritatively interpreting its terms. Thus, if NPT review conference final documents evidence agreement of the treaty parties on the interpretation of the treaty or the application of its provisions, then according to VCLT Article 31(3) this agreement is a significant source of treaty interpretation.⁴⁶

Thus, when in the 2000 NPT Review Conference Final Document the conference of NPT parties by consensus 'agrees on the following practical steps for the systematic and progressive efforts to implement Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,' this agreement can be argued persuasively to constitute an instance of agreement on effective measures relating to nuclear disarmament, in at least partial or progressive fulfillment of the Article VI obligation.

Under this potential conclusion, i.e. that agreement on effective measures relating to nuclear disarmament has been achieved by the agreement on practical steps by the 2000 NPT Review Conference, the next step in the Article VI interpretive exercise is to conclude that, by reference to Article 31(3) of the VCLT, the agreed principles should be taken into account in interpreting the meaning of NPT Article VI. The thirteen steps for implementing Article VI adopted in the 2000 Review Conference Final Document thus become part of the 'yardstick' for determining state compliance with the obligation of Article VI. It has been argued that, even accepting the juridical meaning of the thirteen steps and their relevance for interpreting Article VI, this does not necessarily mean that they are the exclusive test for determining compliance with Article VI.⁴⁷ It may be correct to say that evidence of other efforts not contained in one of the thirteen steps might also be offered to prove at least partial compliance. However, the most

⁴⁶ See Burrus Carnahan, 'Treaty Review Conferences,' 81 *American Journal of International Law* (1987) 226, 229.

⁴⁷ See Christopher A. Ford, 'Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,' 14(3) *Non-proliferation Review* (November 2007) 412.

⁴⁵ On NWS policies related to nuclear arms control during the target era see Christopher Chyba and Karthika Sankumar, 'A World of Risk: The Current Environment for U.S. Nuclear Weapons Policy,' in George Bunn and Christopher Chyba, eds, *U.S. Nuclear Weapons Policy: Confronting Today's Threats* (2006) pp. 11–19; Roger Speed and Michael May, 'Assessing the United States Nuclear Posture,' in *ibid.*, pp. 248–286.

straightforward and clearest reading of the agreement on the thirteen steps in the 2000 NPT Review Conference Final Document is that these steps have been agreed upon by NPT parties as at least the primary means for complying with the obligations in Article VI relating to nuclear disarmament.

Carrying the analysis forward, under this interpretation of the obligation of Article VI relative to nuclear disarmament, agreement has been reached by NPT parties in good faith on effective measures relating to nuclear disarmament. These effective measures are the thirteen steps agreed upon in the 2000 NPT Review Conference Final Document. So interpreted, consideration can move on to an analysis of NWS compliance with this obligation, so defined. However, even a cursory review of the thirteen steps is sufficient to conclude that NPT NWS have not, in fact, complied in their actions with many if not most of the thirteen steps, and did not during the target era pursue policies in harmony with many if not most of them.⁴⁸ The United States, in particular, stated explicitly during the target era that it no longer supported all of the thirteen steps.⁴⁹

Detailed analysis of NWS nuclear weapons policies during the target era has been undertaken by others, and the reader is referred to these in-depth studies.⁵⁰

⁴⁸ See Jean du Preez, 'The 2005 NPT Review Conference: Can it Meet the Nuclear Challenge?' *Arms Control Today* (April 2005):

What should remain clear is that the 1995 package allowed all states-parties to support the indefinite extension while also providing several practical steps for achieving progress toward nuclear disarmament and non-proliferation. The 2000 Review Conference reaffirmed this program of action, including the 'unequivocal undertakings,' and agreed on a set of specific practical 'systematic and progressive' steps to implement Article VI. Although these undertakings are of a political binding nature, they certainly derive from and are linked to the legal commitments and undertakings provided for in the treaty. Most importantly, the treaty clearly would not have been indefinitely extended had it not been for the program of action on nuclear disarmament built into the package that allowed that decision to be taken. The trend by some nuclear-weapon states, such as the United States, to roll back or, in some cases, simply ignore many of these political commitments and undertakings points out yet another weakness in the way the treaty is being implemented. If the nuclear-weapon states are allowed to cherry-pick which commitments they consider applicable, then why are non-nuclear-weapon states refused the same privilege?

See also Lawrence Scheinman, 'Disarmament: Have the Five Nuclear Powers Done Enough?' *Arms Control Today* (Jan/Feb 2005); Daniel H. Joyner, *International Law and the Proliferation of Weapons of Mass Destruction* (2009) pp. 60–66; Christopher Chyba and Karthika Sasikumar, 'A World of Risk: The Current Environment for U.S. Nuclear Weapons Policy,' in George Bunn and Christopher Chyba, eds., *U.S. Nuclear Weapons Policy: Confronting Today's Threats* (2006) pp. 11–19; Roger Speed and Michael May, 'Assessing the United States' Nuclear Posture,' in *ibid.*, pp. 248–286.

⁴⁹ Statement by J. Sherwood McGinnis, Deputy U.S. Representative to the Conference on Disarmament, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference, May 1, 2003.

⁵⁰ See Joseph Cirincione et al., *Deadly Arsenal: Nuclear, Biological and Chemical Threats* (2nd edn, Carnegie Endowment, 2005); Christopher Chyba and Karthika Sasikumar, 'A World of Risk: The Current Environment for U.S. Nuclear Weapons Policy,' in George Bunn and Christopher Chyba, eds., *U.S. Nuclear Weapons Policy: Confronting Today's Threats* (2006) pp. 11–19; Roger Speed and Michael May, 'Assessing the United States' Nuclear Posture,' in *ibid.*, pp. 248–286; David A. Koplow, *Death by Moderation: The U.S. Military's Quest for Usable Weapons* (2009); Ivo Dalder and Jan Lodol, 'The Logic of Zero: Toward a World Without Nuclear Weapons,' 87(6) *Foreign Affairs* (Nov–Dec 2008) 80.

In summary, however, all NWS states kept and maintained their nuclear weapons stockpiles during the target era. The quantity of nuclear weapons in operational readiness in NWS arsenals did decline significantly during the target era. However, as noted above there were no instances of international negotiations or undertakings by or among NWS on a complete and irreversible elimination of national nuclear weapons arsenals, even in a progressive programmatic fashion, as prescribed in the 2000 NPT Review Conference Final Document's thirteen steps. Furthermore, a number of NWS undertook research and development programs aimed at qualitative improvements to their nuclear weapons arsenals, and actually increased the role of nuclear weapons in their security policies, in disharmony with the thirteen steps.⁵¹ NWS policies during the target era uniformly provided for a retention of nuclear weapons in their national arsenals and strategic policies for the foreseeable future, with no near, mid-term or even long-term policy objective of complete and irreversible nuclear disarmament.⁵²

Thus, if agreement was reached by NPT parties in good faith on effective measures relating to nuclear disarmament through the adoption of the thirteen steps agreed upon in the 2000 NPT Review Conference Final Document, it is clear that each and all of the NPT NWS are in noncompliance with the Article VI obligation relating to nuclear disarmament, thus interpreted.

However, it is alternatively possible to argue that the question of whether there has been in the practice of the NWS the pursuit of negotiations in good faith on effective measures relating to nuclear disarmament, as properly interpreted, should be answered in the negative. Essentially, if one does not accept the argument that the thirteen steps agreed in the 2000 Review Conference Final Document constituted such negotiations and agreement produced thereby, then there is no other evidence for the type of negotiations required of all states, including particularly NWS as possessors of nuclear weapons, under Article VI. Indeed, as noted above, the actions of NWS during the target era were in clear disharmony with such a policy of negotiation.

Thus, under this alternative potential conclusion as well, it is clear that each and all of the NPT NWS are in noncompliance with the Article VI obligation relating to nuclear disarmament, thus interpreted.

So in summary on the question of NWS compliance with the NPT Article VI obligation relating to nuclear disarmament, as correctly interpreted, the evidence proffered by NWS themselves to establish their compliance with this obligation has been determined to be incomplete and erroneously offered.

⁵¹ See Christopher Chyba and Karthika Sasikumar, 'A World of Risk: The Current Environment for U.S. Nuclear Weapons Policy,' in George Bunn and Christopher Chyba, eds., *U.S. Nuclear Weapons Policy: Confronting Today's Threats* (2006) pp. 11–19; Roger Speed and Michael May, 'Assessing the United States' Nuclear Posture,' in *ibid.*, pp. 248–286; David A. Koplow, *Death by Moderation: The U.S. Military's Quest for Usable Weapons* (2009) ch 5.

⁵² The one arguable exception to this blanket statement, at least in terms of its rhetoric, is China, which often declared its policy or at least vision of full nuclear disarmament.

Furthermore, even proceeding to an objective analysis of the question of whether there has been in the practice of the NWS the pursuit of negotiations in good faith on effective measures relating to nuclear disarmament, as properly interpreted, both possible alternative answers to this question yield a conclusion, when compared to the actual state practice of NWS during the target period, that each and all of the NPT NWS are in noncompliance with the Article VI obligation relating to nuclear disarmament.

As concluded in this chapter's consideration of NWS legal arguments in the context of both the non-proliferation pillar and the peaceful use pillar of the NPT, the interpretive errors of NWS in the context of the disarmament pillar of the NPT, codified in NPT Article VI, are at their core the result of NWS officials disproportionately prioritizing the non-proliferation pillar of the NPT and incorrectly marginalizing the disarmament pillar of the NPT, and in so doing failing to interpret the provisions of the NPT in their proper context and in the light of the treaty's correctly understood object and purpose.

And again, as concluded particularly in the context of the peaceful use pillar of the NPT in this chapter, the nuclear disarmament policies—or more accurately the lack thereof—maintained by NWS in reliance on these erroneous legal interpretations during the target era, were illegally prejudicial to the legitimate legal interests of NNWS under the NPT's *quid pro quo* grand bargain. As reviewed above in Chapter 2, in the case of a contract treaty such as the NPT, because of the *quid pro quo* reciprocal structure of the treaty's commitments, a material breach by one or a group of parties will almost certainly strike at the heart of the treaty's object and purpose, and persuasively be argued to 'specially affect' the non-breaching parties, and to 'radically change [...] the position of every party with respect to the further performance of its obligations under the treaty.' Thus, a material breach by one party, and *a fortiori* an entire category of states parties to a contract treaty (e.g. the NWS in the NPT Article VI context) will provide strong arguments for the aggrieved category of parties to the treaty (e.g. the NNWS in the NPT Article VI context) pursuant to VCLT Article 60, to suspend the operation of the treaty as between themselves and the breaching state(s).⁵³

⁵³ Yael Ronen comes to essentially the same legal conclusion regarding VCLT Article 60 in her book *The Iran Nuclear Issue* (2010).