The Legality of the Supply of Australian Uranium to India

Kalman A. Robertson

On 4 December 2011 Australia’s federal Labor Government voted to overturn its ban on uranium sales to India. As expected, the policy shift has given rise to vigorous debate on the economic, environmental and diplomatic dimensions of nuclear cooperation with India. However, little has been said about an even more fundamental issue, the legality of the supply of uranium to India.

Professor Donald Rothwell has recently provided legal advice regarding the supply of uranium to India. His advice to the International Campaign to Abolish Nuclear Weapons dated November 2011 on this matter is available online. Professor Rothwell argues that the supply of uranium to India by Australia is a violation of Article 4 of the South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga or SPNFZT). Former Prime Minister Malcolm Fraser agrees, writing that “selling uranium to India would breach our international treaty obligations.” If supply violates the SPNFZT, another party to the SPNFZT could lodge a formal complaint with the Director of the South Pacific Bureau of Economic Cooperation and, if unresolved, ultimately take the matter to the International Court of Justice. If the government is serious about the uranium deal, then the defence of the legality of the deal should be central to decision making.

The question of legality turns on the precise scope of the legal obligations of Australia as a supplier of uranium. The obligations of nuclear supplier states can only be determined through a careful interpretation of the provisions of

---

1 Katharine Murphy, ‘Labor Votes in Favour of Selling Uranium to India’, Sydney Morning Herald (online), 4 December 2011; ‘Uranium Decision a “Sign of Maturity”’, Sydney Morning Herald (online), 4 December 2011.
5 Malcolm Fraser, ‘Canberra’s Abject Submission to US Pressure is Shameful’, The Age (online), 11 December 2011.
6 SPNFZT annex 4. Evidently, there is no requirement to establish standing to make a complaint.
the Nuclear Non-Proliferation Treaty (NPT)\textsuperscript{7} and, in the case of Australia, also the SPNFZT. The differing legal statuses of the parties and non-parties to these treaties, and of nuclear-armed states and non-nuclear armed states, give rise to complicated issues of treaty interpretation where states engage in nuclear cooperation.

Through the use of treaty interpretation, this article argues that the NPT and the SPNFZT do not create legal barriers in principle to the supply of Australian uranium to India where the associated nuclear material is subject to India’s item-specific International Atomic Energy Agency (IAEA) safeguards. It is possible to draft and implement an agreement with India that is consistent with Australia’s existing international treaty obligations.\textsuperscript{8}

**The Provisions**

As with any exercise in treaty interpretation, it is absolutely essential to define the terms in the treaty. The abbreviation ‘NM’ will be used throughout for “source or special fissionable material, or equipment or material especially designed or prepared for the processing, use or production of special fissionable material for peaceful purposes” (to use the language in Art III.2 of the NPT and Art 4(a) of the SPNFZT).\textsuperscript{9} The uranium to be transferred under the proposed Australia-India deal is NM.

The relevant provision of the Treaty of Rarotonga (SPNFZT) is Art 4(a)(i):

> Each Party undertakes not to provide [NM] to any non-nuclear-weapon State unless subject to the safeguards required by Article III.1 of the NPT.

The parallel provision of the NPT is Art III.2:

> Each State Party to the Treaty undertakes not to provide [NM] to any non-nuclear-weapon state unless the source or special fissionable material shall be subject to the safeguards required by this Article.

Here the reference to “safeguards required by this Article” is a reference to Article III.1. The wording of the two provisions is effectively the same.\textsuperscript{10}

\textsuperscript{7} *Treaty on the Non-Proliferation of Nuclear Weapons*, opened for signature 1 July 1968, 729 UNTS 161 (entered into force 5 March 1970) (NPT).

\textsuperscript{8} Of course it is impossible to comment conclusively on the legality of an agreement prior to the drafting of precise terms. This article argues that, properly drafted, there should be no major legal difficulties.

\textsuperscript{9} Uranium ore concentrate is not ‘source or special fissionable material’ but it can be refined and converted into source or special fissionable material, see definitions in Art XX of Statute of the International Atomic Energy Agency, opened for signature 23 October 1956, 276 UNTS 3 (entered into force 29 July 1957) (as amended on 4 October 1961, 471 UNTS 334).

\textsuperscript{10} In the case of uranium ore concentrate that is not classed as ‘source or special fissionable material’, the provision requires that Article III.1 NPT safeguards be applied once the ore is converted to source or special fissionable material, which is the first thing that a recipient state
States and Safeguards
Under the NPT and for the purposes of this article, a ‘nuclear-weapon state’ is a state that manufactured and exploded a nuclear explosive device prior to 1 January 1967.\textsuperscript{11} India manufactured and exploded its first nuclear explosive device after this date so it is not a ‘nuclear-weapon state’. Instead, India is generally referred to as a ‘nuclear-armed state’. The definition of ‘non-nuclear-weapon state’ is a substantive issue considered below.

Throughout, the term ‘non-NPT state’ will be used to refer to states that have not ratified the NPT. In 2012, the non-NPT states are India, Israel and Pakistan.\textsuperscript{12} The non-NPT states each have ‘item-specific’ or ‘INFCIRC/66’ safeguards agreements with the IAEA over some of their nuclear facilities and materials.\textsuperscript{13} These agreements do not apply to all facilities and materials in the state (they are not ‘comprehensive’). The standard form for item-specific safeguards is contained in IAEA document INFCIRC/66/Rev.2,\textsuperscript{14} which predates the NPT. Material that is exported subject to INFCIRC/66 safeguards must remain under these safeguards as it progresses through the fuel cycle and changes chemical forms.\textsuperscript{15} Provided that the recipient state adheres to these safeguards (which are legally binding under both its bilateral agreement with the IAEA and under its bilateral agreement with the supplier state), there is no way that exported NM can be diverted from peaceful applications.

\textsuperscript{11} NPT Art IX.3.
\textsuperscript{12} It does not matter for present purposes whether the Democratic People’s Republic of Korea, which announced withdrawal from the NPT in 2003, is considered to be a non-NPT state.
\textsuperscript{14} The Agency’s Safeguards System, IAEA Doc INFCIRC/66/Rev.2 (16 September 1968) (‘INFCIRC/66’).
\textsuperscript{15} Similar issues are raised by the export of Australian uranium to the (official) nuclear-weapon states, which have some (but not all) of their facilities under IAEA ‘voluntary offer safeguards’. For an explanation of the principle of equivalence for the tracking of Australian obligated nuclear material (nuclear material derived from Australian uranium) through the fuel cycle, see Joint Standing Committee on Treaties, Report 81: Treaties Tabled on 8 August 2006(2): Agreement between the Government of Australia and the Government of the People’s Republic of China on the Transfer of Nuclear Material (Canberra, 3 April 2006) and Agreement between the Government of Australia and the Government of the People’s Republic of China for Cooperation in the Peaceful Uses of Nuclear Energy (Canberra, 3 April 2006) (2006) paragraphs 47, 55, 60.
The terms ‘comprehensive safeguards’ and ‘full-scope safeguards’ may be used interchangeably. These terms are not used in the relevant treaties and their definitions are ambiguous. Instead, the treaties refer to the “safeguards required by Art III.1”. Article III.1 describes safeguards (referred to here as ‘Art III.1–type safeguards’) that are “applied [by the IAEA] on all source or special fissionable material in all peaceful nuclear activities.”

All non-nuclear-weapon states parties to the NPT are required to conclude Art III.1–type safeguards agreements with the IAEA. The standard form for these agreements is contained in IAEA document INFCIRC/153 (Corrected). INFCIRC/153 safeguards involve detailed reporting and accounting procedures for all of the state’s nuclear materials and facilities. The IAEA also has the authority to inspect all nuclear facilities in the state.

It is not clear whether something less rigorous than the INFCIRC/153 standard could be considered ‘Art III.1–type safeguards’. It may be possible to satisfy the Art III.1 standard by a non-NPT state accepting safeguards over all of its peaceful nuclear facilities and materials, while also operating a completely separate military nuclear fuel cycle for weapons purposes (i.e. unsafeguarded facilities and materials for nuclear weapons activities). The argument could be made that INFCIRC/66 safeguards satisfy the Art III.1 standard if it is assumed that all materials and facilities in the state that are not declared under the INFCIRC/66 safeguards agreement are not part of ‘peaceful nuclear activities’. If this interpretation is accepted then the supply of Australian uranium to a non-NPT state, subject to INFCIRC/66 safeguards, is legal. For simplicity, this article will assume that this argument would not succeed. It is assumed that only safeguards equivalent in scope and effect to INFCIRC/153 can be termed Art III.1–type safeguards. Furthermore, it is safe to assume that India will not accept Art III.1–type safeguards in the foreseeable future.

Summary of Interpretations

The difficulty surrounds the definition of ‘non-nuclear-weapon state’ and the interpretation of ‘subject to safeguards required by Article III.1’ of the NPT for the purposes of determining the obligations of the supplier state under the NPT and the SPNFZT. Rothwell argues that India is a non-nuclear-weapon state. He also assumes that the clause ‘safeguards required by Article III.1’ requires the application of Art III.1–type safeguards in India. Since India

---

16 NPT Art III.1.
17 The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons, IAEA Doc INFCIRC/153 (Corrected) (June 1972) (INFCIRC/153).
18 For non-nuclear-weapon states that have signed the NPT, this would be a violation of Art II.
19 The argument could fail because the text of NPT Art III.1 was drafted to distinguish Art III.1–type safeguards from INFCIRC/66 safeguards.
does not have Art III.1–type safeguards, he concludes that the supply of uranium to India would violate the SPNFZT.

There are three alternatives to Rothwell’s approach (referred to as interpretations ‘(1)’, ‘(2)’ and ‘(3)’ throughout) that would lead to the conclusion that the supply is not contrary to the NPT or to the SPNFZT:

1. India falls under a *sui generis* exception to provisions of the form ‘to a non-nuclear-weapon state unless subject to safeguards required by Art III.1.’

2. Non-NPT states (or at least non-NPT states that possess nuclear weapons) are not non-nuclear-weapon states for the purposes of the NPT and SPNFZT.

3. In the case of a non-NPT recipient state, the ‘safeguards required by Art III.1’ are no safeguards at all since this article of the NPT cannot have any application once NM is transferred to the non-NPT recipient state.

If any one of these three interpretations can be established then the supply of uranium to India will not be contrary to the NPT or the SPNFZT. The next section demonstrates that Rothwell’s approach leads to unreasonable results. The following section makes the case for each of the alternative interpretations.

**Analysis of the Text of the Provisions and Practice in Interpretation**

The wording of Art 4(a)(i) of the SPNFZT is effectively the same as the wording of Art III.2 of the NPT. The only way they can be given different interpretations is if there is a basis in the law of treaties for doing so. Rothwell does not state expressly in his argument that he wishes to give Art III.2 of the NPT and Art 4(a)(i) of the SPNFZT different interpretations.

Regardless, the text of both provisions is ambiguous as to the effect on the transfer of nuclear material from an NPT state to a non-NPT state. Therefore, reference can be made to the negotiating histories (preparatory work) and subsequent state practice in application to determine their meanings.²⁰

Following the entry into force of the NPT and prior to the drafting of the Treaty of Rarotonga, multiple agreements for the transfer of NM from NPT states to non-NPT states were made without requiring that the non-NPT state accept Art III.1–type safeguards. In the 1970s and 1980s many

---

nuclear suppliers, such as Canada, were party to the NPT, while some of their nuclear recipients, such as Argentina, were not party to the NPT and had not accepted Art III.1–type safeguards. This suggests that subsequent practice has adopted interpretation (2) or interpretation (3). The Final Declaration of the 1975 NPT Review Conference implicitly endorsed this approach when it noted, “[w]ith regard to the implementation of Art III.2 of the Treaty”, that a number of suppliers exported to non-NPT states. The Conference attached particular importance to the condition, established by these states, “of an undertaking of non-diversion to nuclear weapons”.

The Treaty of Rarotonga was drafted in the early-to-mid 1980s. The use of the same language as NPT Art III.2 in the drafting of the Treaty of Rarotonga, suggests that the parties accepted that this wording does not prohibit the export of NM from NPT states to non-NPT states even where export is made without requiring that the non-NPT state accept Art III.1–type safeguards. Use of the same language indicates acceptance of the interpretation given by state practice. If the drafters of the Treaty of Rarotonga wanted to create more restrictive obligations than NPT Art III.2 then they should not have used the same language as NPT Art III.2. The negotiating history supports the conclusion that the meaning of SPNFZT Art 4(a)(i) is the same as NPT Art III.2. Therefore, any act by an NPT state that would, if it were a party to the SPNFZT, breach SPNFZT Art 4(a)(i) would also breach NPT Art III.2 and visa versa. For those seeking to advance the case that the supply of Australian uranium to India is illegal, the advantage of activating the SPNFZT provisions lies in the dispute resolution (complaints) procedure and in the robust withdrawal provision.

Paragraph 12 of the Final Document of the 1995 NPT Review Conference stated that “[n]ew supply arrangements for the transfer of [NM] should require, as a necessary precondition, acceptance of the Agency’s full-scope safeguards”. It is not clear from the text of the document whether this was intended to influence the interpretation of Art III.2 but it certainly has not been given this effect in practice. In 2001, when the United States argued

---

22 Ibid., p. 3. This ‘undertaking’ did not involve acceptance of Art III.1–type safeguards.
23 The complaint procedure in SPNFZT Annex 4 allows any party to bring a complaint that another party is in breach. The grounds for withdrawal from the SPNFZT in order to avoid the associated legal obligations are narrow: SPNFZT Art 13.
24 Paragraph 12 of ‘Decision 2: Principles and Objectives for Nuclear Non-Proliferation and Disarmament’ UN Doc NPT/CONF.1995/32 (Part I), Annex (2 December 1995). This statement was made to discourage the belief that NPT non-nuclear-weapon states could withdraw from the treaty and receive NM with a relaxed verification standard.
before the NSG that the Russia-India deal undermined NSG principles, there was no serious debate about the legality of the deal.\textsuperscript{26} Even long before the 2006 amendment to its \textit{Atomic Energy Act} to allow cooperation with India, the United States has consistently recognised that the NPT does not prohibit nuclear supply to non-NPT states that do not have INFCIRC/153--type safeguards.\textsuperscript{27} The Final Document of the 2010 NPT Review Conference merely ‘recalls’ paragraph 12 of the 1995 Review Conference without any additional comments.\textsuperscript{28} Therefore, practice in interpretation has not changed the meaning of the NPT or SPNFZT provisions since the drafting of the SPNFZT.

Professor Rothwell’s interpretation is that it would be a breach of SPNFZT Art 4(a)(i) for a SPNFZT state to supply NM to a non-NPT state that did not have Art III.1--type safeguards. Then it must follow from his interpretation that it would breach NPT Art III.2 for an NPT state to supply NM to a non-NPT state that did not have Art III.1--type safeguards. If we accept that Australia’s supply of uranium to India is a violation of SPNFZT Art 4(a)(i), then all transfers by NPT states to India, Pakistan and Israel must also be violations of NPT Art III.2. This would include all of the recent nuclear supply agreements to India,\textsuperscript{29} as well as the supply of reactors to Pakistan from China that are specifically backed by IAEA INFCIRC/66 safeguards.


\textsuperscript{29}One commentator has concluded that the US-India Civil Nuclear Cooperation Initiative necessarily violates NPT Art III.2: Quentin Michel, ‘The US-India Civil Nuclear Cooperation Initiative: The Question of Safeguards’, in Henry D Sokolski (ed.), \textit{Falling Behind: International Scrutiny of the Peaceful Atom} (Carlisle: Strategic Studies Institute, 2008), pp. 311-22. It is also worth noting the lone opinion of Walter Gangl, who has argued that the norm of non-proliferation is \textit{jus cogens}, and that the supply of nuclear material to states lacking adequate safeguards is a violation, thus rendering transfer agreements void: Walter Gangl, ‘\textit{Jus Cogens} Dimensions of Nuclear Technology’, \textit{Cornell International Law Journal}, vol. 13, no. 1 (1980), p. 82.
agreements. This is an unreasonable result and therefore Rothwell’s interpretation cannot be the correct approach.

**Application to Interpretations**

This section outlines the case for each of the three alternative approaches to Rothwell’s interpretation. The third approach, which builds on the evidence for the first two, perhaps best encapsulates the state of international law.

**INDIA SUI GENERIS**

India’s circumstances (non-signatory of the NPT that tested nuclear weapons after 1967 and continues to possess nuclear weapons) are not specifically provided for in the NPT. Interpretation (1) contends that it is therefore up to the parties to the NPT to determine how the requirements of NPT Art III operate in relation to India. The history of nuclear cooperation between NPT states and India indicates that Article III.1–type safeguards are not required. Instead, the generally accepted standard appears to be that the exported NM be subject to INFCIRC/66 safeguards. In September 2008, the forty-six members of the Nuclear Suppliers Group (including two states parties to the SPNFZT, Australia and New Zealand) agreed that the strict controls on export to ‘non-nuclear-weapon states’ contained in the NSG guidelines do not affect trade with India. This so-called ‘clean waiver’ confirmed the interpretation that NPT Art III (and SPNFZT Art 4(a)) does not prevent trade with India.

Therefore, the accepted interpretation is that India is *sui generis*. The supply of NM to India, subject to INFCIRC/66 safeguards, is not prohibited by the NPT or the SPNFZT. Interpretation (1) is likely to resonate well with those who would like to distinguish India from other non-NPT states for the purposes of supply of NM.

**INDIA IS NOT A NON-NUCLEAR-WEAPON STATE**

Rothwell is right to point out that the terms ‘nuclear-weapon state’ and ‘non-nuclear-weapon state’ should be given the same interpretation under the

---


32 ‘Statement on Civil Nuclear Cooperation with India’, NSG Document from Extraordinary Plenary Meeting on 6 September 2008 (reproduced in ‘Communication Dated 10 September 2008 Received from the Permanent Mission of Germany to the Agency Regarding a “Statement on Civil Nuclear Cooperation with India”’, IAEA Doc INFCIRC/734 (Corrected) (10 September 2008)).
Treaty of Rarotonga as they are given under the NPT. India cannot be a ‘nuclear-weapon state’ for the purposes of the NPT or the SPNFZT.\textsuperscript{33}

Here it is crucial to recognise that, while the NPT defines ‘nuclear-weapon state’, it does not define ‘non-nuclear-weapon state’ and this term has not been given an unambiguous definition under international law.

The IAEA has a long history of administering INFCIRC/66 safeguards in non-NPT states over nuclear material supplied by NPT states, suggesting that it has no objection to this approach to supply. If there is a norm of international law for the supply of nuclear material to non-NPT states, it does not rise above the INFCIRC/66 standard. This practice can only be consistent with the NPT if we accept that non-NPT states are not non-nuclear-weapon states for the purposes of the NPT (or if we accept interpretation (3) below).

Therefore, non-NPT states are neither ‘nuclear-weapon states’, nor ‘non-nuclear-weapon states’. Consequently, neither NPT Art III.2, nor SPNFZT Art 4(a) apply to the supply of uranium by NPT states to non-NPT states. Supply to India (or Israel or Pakistan) is not prohibited by the NPT or the SPNFZT.

\textbf{The requirements of Art III.1 are limited}

An NPT state could provide NM to a non-NPT state ‘subject to the safeguards required by Article III.1 of the NPT’. The ‘safeguards required by Article III.1’ of the NPT are:

\begin{itemize}
\item[a)] For the period of time prior to completion of the transfer process:
\begin{itemize}
\item either Art III.1–type safeguards (if the supplier is a non-nuclear-weapon state party to the NPT) or no safeguards (if the supplier is a nuclear-weapon state)
\end{itemize}
\item[b)] After the transfer process is complete: no safeguards
\end{itemize}

Once the material is in Indian hands ‘the safeguards required by Article III.1’ are no safeguards at all since India is not bound by Article III.1. This literal interpretation, of course, is consistent with the argument based on historical state practice made above as well. Supply to India (or Israel or Pakistan) is not prohibited by the NPT or the SPNFZT.

The generally accepted standard for supply of NM to non-NPT states is INFCIRC/66 safeguards. This may be a norm of customary international law but it does not arise clearly from the text of the NPT or SPNFZT.\textsuperscript{34} It would also be difficult to read in a requirement of any particular safeguards

\textsuperscript{33} See above footnote 11 and surrounding text.

\textsuperscript{34} On the inconsistency between INFCIRC/66 safeguards and Art III.1–type safeguards, see above footnote 19 and surrounding text.
standard into the statement at the end of SPNFZT Art 4(a) (“Any such provision shall be in accordance with strict non-proliferation measures to provide assurance of exclusively peaceful purposes”).

Of course, this conclusion would be different if Art 4(a)(i) of SPNFZT read, for example, “unless subject to comprehensive safeguards consistent with or equivalent in scope and effect to IAEA Doc INFCIRC/153 (Corrected)” or

unless all of the source and special fissionable material, including the materials related to the NM to be imported, in all peaceful nuclear activities in the recipient state is subject to an IAEA comprehensive safeguards agreement.

Indeed, Annex 2 of the SPNFZT makes this explicit by referring to “INFCIRC/153 (Corrected)”. Of course, Annex 2 only relates to Article 8 on the application of safeguards within SPNFZT states. The fact that different language was used in Article 4 only adds weight to the argument for interpretations (1), (2) or (3). If the drafters of SPNFZT Article 4 wanted to ensure that transfers to non-NPT states would be subject to Article III.1–type safeguards then they should have adopted the language in SPNFZT Annex 2 and not the language in NPT Article III.2.

**Conclusion**

The text of the NPT is ambiguous as to whether or not it prohibits the supply by an NPT state of NM to a non-NPT state that has not accepted Article III.1–type safeguards over all of its peaceful nuclear materials and activities. The argument that such supply to India is a violation of the NPT is inconsistent with decades of practice under the NPT regime. The ambiguity must be resolved by interpreting the NPT as not prohibiting such supply. Therefore, the supply of Australian uranium to India (or at least supply subject to INFCIRC/66 safeguards) cannot be a violation of the NPT. In the absence of a legal basis for giving the parallel provision in the SPNFZT a different interpretation, it must follow that supply is not a violation of the SPNFZT either.

Australia can make an agreement with India for the supply of uranium that will not be susceptible to legal challenge on the grounds that it is a violation of existing arms control treaties.

Kalman A. Robertson joined the Strategic and Defence Studies Centre at the Australian National University (ANU) as a doctoral candidate in February 2011. Mr Robertson completed degrees in law and physics with First Class Honours at ANU. His research interests include nuclear non-proliferation, international security institutions, verification and nuclear physics. kalman.robertson@anu.edu.au.