

# Chapter 2

## Issues raised in evidence

### Introduction

2.1 This chapter considers a range of issues raised in evidence which address whether Australia can supply nuclear material to India consistent with its obligations under the Nuclear Non-Proliferation Treaty (NPT) and the South Pacific Nuclear Free Zone Treaty (Rarotonga Treaty). It summarises the concerns raised by some submitters as well as the benefits of the bill. It concludes with the committee's view and recommendation.

### Conflict with international obligations

2.2 Some submitters argued that Australia may be in breach of its international obligations under both the NPT and the Rarotonga Treaty. Under the NPT, Australia undertook not to in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices.<sup>1</sup> Under the Rarotonga Treaty, Australia undertook not to take any action to assist or encourage the manufacture or acquisition of any nuclear explosive device by any state.<sup>2</sup> Under both of these treaties, Australia has a responsibility to ensure that nuclear material transferred to India is not used for, and does not contribute to, the production of nuclear weapons.

2.3 Evidence from Mr John Carlson, Former Director General of the Australia Safeguards and Non-Proliferation Office and non-resident Fellow of the Lowy Institute, argued that 'this bill attempts to make lawful actions that, at the least, are questionable in international law, namely, approval of nuclear supply to India under the Australia-India nuclear cooperation agreement.'<sup>3</sup>

2.4 Likewise, Mr Ernst Willheim, Visiting Fellow, ANU College of Law, argued that the bill would have no direct effect if Australia's nuclear exports to India were in fact consistent with Australia's relevant obligations and procedures.<sup>4</sup> He argued:

The only possible operation for the proposed legislation would be in circumstances where there was an actual or alleged breach of Australia's obligations or an actual or alleged failure to observe procedures. In those circumstances the proposed legislation would seemingly validate what might otherwise be invalid. The obvious inference is that the Government is contemplating action that may be inconsistent with Australia's obligations

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1 *Treaty on the Non-Proliferation of Nuclear Weapons*, London, Moscow, and Washington, 1 July 1968, entry into force 23 January 1973, ATS 1973 (No. 3), Article I.

2 *South Pacific Nuclear Free Zone Treaty*, Rarotonga, 6 August 1985, entry into force 11 December 1986, ATS 1986 (No. 32), Article 3.

3 Mr John Carlson, *Submission 2*, p. 1.

4 Mr Ernst Willheim, *Submission 7*, pp 3–4.

or the exercise of powers or functions without regard to those obligations and that the Government wishes prospectively to validate such activities.<sup>5</sup>

2.5 The Australia Conservation Foundation argued that the *Agreement between the Government of Australia and the Government of India on Cooperation in the Peaceful Uses of Nuclear Energy* (the Agreement), aided by this bill, would serve to increase nuclear safety and security concerns. It stated that the Agreement fails to advance non-proliferation outcomes and is in clear conflict with Australia's international obligations under the Rarotonga Treaty.<sup>6</sup> The Foundation noted that the Rarotonga Treaty also obliges signatories not to supply equipment or material to countries, including India, not under full scope safeguards.<sup>7</sup>

2.6 The Uniting Church in Australia expressed concern that the bill grants significant domestic legal protection to private corporations in order to grant them certainty over profits on potential uranium exports to India.<sup>8</sup> It argued that uranium trade with India undermines a fundamental principle of the global non-proliferation and disarmament regime: the principle that only signatories to the NPT can engage in international nuclear trade for their civilian nuclear programs.<sup>9</sup>

2.7 Similarly, the Medical Association for the Prevention of War argued that exporting to India 'sends a strong signal to NPT signatories that the treaty has no future value. With the proposed legislation Australia is signalling that commercial interests outweigh the international safeguards provided by the NPT.'<sup>10</sup>

2.8 Mr Ernst Willheim also argued that, although the bill would cure any invalidity arising from breaches of Australia's obligations under domestic law, the legislation would not have any effect in relation to Australia's obligations as a matter of international law.'<sup>11</sup>

### **India-specific issues**

2.9 As India is not a signatory to the NPT, submitters raised a number of concerns, including that:

- Australia cannot be certain that subsequent generations of transferred material will not be used for weapons development;<sup>12</sup>
- India's nuclear industry is the subject of continuing and unresolved safety problems and regulatory deficiencies;<sup>13</sup>

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5 Mr Ernst Willheim, *Submission 7*, p. 3.

6 Australian Conservation Foundation, *Submission 3*, p. 4.

7 Australian Conservation Foundation, *Submission 3*, p. 4.

8 Uniting Church in Australia, Synod of Victoria and Tasmania, *Submission 8*, p. 3.

9 Uniting Church in Australia, Synod of Victoria and Tasmania, *Submission 8*, p. 7.

10 Medical Association for the Prevention of War, Australia, *Submission 9*, p. 2.

11 Mr Ernst Willheim, *Submission 7*, p. 4.

12 Mr John Carlson, *Submission 2*, p. 3.

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- India does not have clear separation between its civil and military nuclear programs;<sup>14</sup> and
  - imported uranium frees up India's domestic reserves to be used for its nuclear weapons program.<sup>15</sup>

### *Principle of pursuit*

2.10 Mr John Carlson expressed his concern that the India-IAEA safeguards agreement may not be fully consistent with NPT safeguards requirements, specifically, the 'principle of pursuit'.<sup>16</sup> The principle requires that safeguards must apply not only to the nuclear material supplied, but to all subsequent generations of nuclear material produced by or through the use of that material. As Mr Carlson explained:

...the India-IAEA safeguards agreement does not fully meet this principle. Because the NCA [the Australia-India Agreement] depends on the operation of the India-IAEA agreement, deficiencies in the latter agreement impact directly on the NCA...While the India-IAEA agreement compromises the principle of pursuit with respect to plutonium production (a highly sensitive stage of the fuel cycle), the NPT allows no such compromise. Faced with an agreement such as the India-IAEA agreement that does not fully reflect NPT requirements, an NPT party must ensure that its NPT obligations are met in full.

This principle is written into the Australia-India NCA [Article III.1.(d)], but the effect of the NCA is qualified through its dependence on the terms of the India-IAEA agreement. As I pointed out in my submissions to JSCOT, this is a major weakness in the NCA. The India-IAEA agreement allows India to use safeguarded material, which could include AONM, to produce unsafeguarded plutonium.<sup>17</sup>

2.11 Mr Carlson suggested that the bill be amended to require that the person exercising the relevant power must be satisfied that not only is the exported nuclear material subject to safeguards under the India-IAEA agreement, but that all its subsequent generations of nuclear material produced or processed will be as well.<sup>18</sup>

2.12 This issue was discussed during the Joint Standing Committee on Treaties (JSCOT) inquiry into the Agreement. Dr Robert Floyd, Director General of the Australian Safeguards and Non-Proliferation Authority, assured the committee that the provisions of the India-IAEA agreement would prevent such a situation occurring. Dr

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13 Australian Conservation Foundation, *Submission 3*, p. 1.

14 Mr John Carlson, *Submission 2*, p. 2.

15 Australian Conservation Foundation, *Submission 3*, p. 3.

16 Mr John Carlson, *Submission 2*, p. 2.

17 Mr John Carlson, *Submission 2*, pp 2–3.

18 Mr John Carlson, *Submission 2*, p. 4.

Floyd made it clear that India's obligations under the agreement prohibit Australian nuclear material from being used for military purposes at all times.<sup>19</sup>

### ***Unresolved safety and regulatory issues***

2.13 A number of submitters presented their concerns that India's nuclear industry has unresolved safety and regulatory issues.<sup>20</sup> The Uniting Church in Australia noted that India had scored poorly on the 2016 nuclear security index produced by the Nuclear Threat Initiative, which suggested that India's security conditions could be improved by strengthening on-site protection, controls, and accounting and noted:

India's nuclear materials security conditions remain adversely affected by its continued increase in quantities of nuclear material, high levels of corruption among public officials, and the presence of groups interested in and capable of illicitly acquiring nuclear materials.<sup>21</sup>

2.14 The Australian Conservation Foundation noted that the Indian Auditor-General's report in 2012 highlighted continuing safety and regulatory deficiencies, and warned of a disaster similar to Fukushima or Chernobyl if nuclear safety issues were not addressed:

The concerns highlighted in this report, including lax regulation, poor governance and a deficient safety culture, remain largely unaddressed. Given that Australian uranium directly fuelled the Fukushima nuclear crisis it is incumbent on Australia, as a potential uranium supplier to India, to take these concerns seriously and take explicit action to confirm the status of industry compliance with the Auditor-General's recommendations.<sup>22</sup>

2.15 Likewise, the Synod referred to media reports that emphasized on-going safety concerns regarding India's nuclear reactors, and drew attention to India's lack of an independent nuclear regulatory agency.<sup>23</sup> The Australian Conservation Foundation's argued that:

[India] does not allow International Atomic Energy Agency inspections of all its nuclear plants, refuses to sign the Comprehensive Test Ban Treaty and continues to expand its nuclear arsenal and missile capabilities. India's continuing tension with Pakistan makes the sub-continent is one of the world's most precarious nuclear hot spots.<sup>24</sup>

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19 Joint Standing Committee on Treaties, *Report 151: Treaty tabled on 28 October 2014*, September 2015, pp 47–48.

20 For example: Mr John Carlson, *Submission 2*; Australian Conservation Foundation, *Submission 3*; Uniting Church in Australia, Synod of Victoria and Tasmania, *Submission 8*; Medical Association for the Prevention of War, Australia, *Submission 9*.

21 Uniting Church in Australia, Synod of Victoria and Tasmania, *Submission 8*, p. 2.

22 Australian Conservation Foundation, *Submission 3*, p. 2.

23 Uniting Church in Australia, Synod of Victoria and Tasmania, *Submission 8*, pp 3 and 10.

24 Australian Conservation Foundation, *Submission 3*, p. 3.

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### ***Separation of civil and military activities***

2.16 Submitters expressed their concern that India does not have clear separation between its civil and military nuclear programs.<sup>25</sup> The Synod expressed its alarm that the bill makes no mention of the recommendations of the JSCOT report, in particular recommendation three. It argued that there is no formal verification of whether facilities in the 'civilian unsafeguarded' stream are contributing nuclear material to India's nuclear weapons program.<sup>26</sup>

2.17 Similarly, Mr Carlson argued that although India has excluded several major 'civilian' facilities from permanent safeguards, the India-IAEA agreement still allows India to use Australian material in those reactors.<sup>27</sup>

2.18 Mr Carlson suggested that as India is not prepared to fully separate its military and civil programs, an alternative approach would be to require that Australian material be used only in a permanently safeguarded facility, and listed in an annex to the India-IAEA agreement.<sup>28</sup>

### ***Imported uranium would free up India's domestic reserves for weapons***

2.19 The Australian Conservation Foundation and the Medical Association for the Prevention of War expressed concern that the provision of Australian uranium to India would indirectly facilitate the expansion of India's military nuclear sector.

2.20 Both argued that even if Australian uranium does not go directly to India's nuclear weapons program, the use of imported uranium in civilian nuclear reactors would free up domestic reserves to be used for weapons development. They cited the former head of India's global strategic development task force, who stated in 2005:

Given India's uranium ore crunch and the need to build up our minimum credible deterrent as fast as possible, it is to India's advantage to categorise as many power reactors as possible as civilian ones to be refuelled by imported uranium and conserve our native uranium fuel for weapon-grade plutonium production.<sup>29</sup>

### **Subjective wording of the bill**

2.21 Mr Carlson also expressed his concern that the bill uses a subjective standard rather than an objective standard based on facts. Clause 8 of the bill states that 'the person exercising the power or the performing the function is satisfied that the nuclear

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25 For example: Mr John Carlson, *Submission 2*, p. 2; and the Australian Conservation Foundation, *Submission 3*, p. 3.

26 Uniting Church in Australia, Synod of Victoria and Tasmania, *Submission 8*, pp 1 and 3.

27 Mr John Carlson, *Submission 2*, p. 3.

28 Mr John Carlson, *Submission 2*, p. 4.

29 Australian Conservation Foundation, *Submission 3*, p. 3; and the Medical Association for the Prevention of War, Australia, *Submission 9*, p. 2.

material or nuclear-related item will be subject to safeguards under the India-IAEA agreements if supplied to a place in India'.<sup>30</sup>

2.22 Mr Carlson suggested removing the subjective wording of 'satisfied' to create an objective standard. The clause would instead state that: 'the nuclear material or nuclear-related item will be subject to safeguards under the India-IAEA agreements if supplied to a place in India'.<sup>31</sup>

### **Expected benefits of the bill**

2.23 The committee received evidence which demonstrated that India's plan to significantly increase its nuclear energy supply presents a range of potential economic benefits for Australia exporters over the medium and long term.<sup>32</sup> As well as potentially increasing Australia's export revenue and regional employment opportunities, India's nuclear energy expansion is likely to make a valuable contribution to a reduction in carbon emissions. It will also help to power economic growth and poverty reduction in the world's fastest growing major economy.<sup>33</sup> Nuclear cooperation will also contribute to a strengthening of bilateral ties between Australia and India.<sup>34</sup>

### ***Clarification of Australia's existing obligations***

2.24 As the NPT and the Rarotonga Treaty include provisions in relation to safeguards that apply to Australia's nuclear exports to India, there is potential for alternative interpretations of the relevant safeguards obligations. According to DFAT, the bill will ensure that there is no uncertainty under Australian law that could hinder uranium exports to India.<sup>35</sup> The Minerals Council of Australia agreed noting that:

[t]he bill clears away any concern and ambiguity on the legality of uranium sales to India. It was always envisaged that India's uniqueness following on from the 2008 Nuclear Suppliers Group decision, might require a bill of this kind to clarify Australia's relevant international obligations for the purposes of the relevant laws.<sup>36</sup>

2.25 It also noted that the Australia-India Agreement was entered into with bipartisan support; negotiations were commenced by the Labor government in 2013 and completed by the Coalition government in 2014: 'the potential need for a bill such

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30 Civil Nuclear Transfers to India Bill 2016, cl. 8.

31 Mr John Carlson, *Submission 2*, pp 5–6.

32 For example: Minerals Council of Australia, *Submission 4*; Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*; and the Department of Industry, Innovation and Science, *Submission 6*.

33 Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*, p. 2.

34 EM p 2

35 Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*, p. 2.

36 Minerals Council of Australia, *Submission 4*, p. 2.

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as this was understood as far back as 2011 when the ALP amended its policy on uranium sales to India.<sup>37</sup>

### ***Economic potential***

2.26 According to DFAT, India represents a modest market for Australian uranium in the short term, but with huge growth potential over the long term. Timely engagement in the Indian market would maximise the opportunity for Australian uranium export companies,<sup>38</sup> with India's potential uranium demand likely to generate substantial construction and operational jobs in regional Australia.<sup>39</sup>

2.27 India aims to supply 25 per cent of its energy from nuclear power by 2050 and currently has 22 operable reactors, five more under construction, 20 planned within the next eight to ten years, and a further 44 have been proposed.<sup>40</sup>

2.28 Australia has nearly a third of the world's uranium resources and approximately 10 per cent of global production.<sup>41</sup> Australia produces around 7 000 tonnes of uranium ore concentrates each year.<sup>42</sup> The Department of Atomic Energy in India stated India's intention to buy up to 1 500 tonnes of uranium from Australia over the next five years.<sup>43</sup>

2.29 According to the Minerals Council of Australia, India could be generating over 800 TWh of nuclear power by 2040, requiring around 18 000 tonnes of uranium per annum.<sup>44</sup> Australia could sustainably target 30 per cent of this demand, which is approximately equivalent to Australia's entire uranium exports in 2014-15 of 5 515 tonnes.<sup>45</sup> It noted:

Australian exporters are currently having preliminary commercial negotiations with Indian customers who are keen to secure Australian uranium. Access to Australian uranium will increase India's ability to obtain material which could in turn assist Indian reactor capacity uptake and also provide India with supply security and diversity. Australian exporters are well poised to take advantage of this growth opportunity in

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37 Minerals Council of Australia, *Submission 4*, p. 2.

38 Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*, p. 2.

39 Minerals Council of Australia, *Submission 4*, p. 3.

40 Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*, p. 2.

41 Minerals Council of Australia, *Submission 4*, p. 3.

42 Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*, p. 2.

43 Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*, p. 2.

44 Minerals Council of Australia, *Submission 4*, p. 3.

45 Minerals Council of Australia, *Submission 4*, p. 3.

India as logistically it is significantly closer to Australia than other countries Australia currently supplies.<sup>46</sup>

2.30 However, the Uniting Church of Australia expressed scepticism at India's plans to increase its nuclear power supply, citing the International Energy Agency's assessment that, 'despite the Indian Government's stated wishes, a realistic assessment is that even under the current policy setting the nuclear share of total generation will barely double from 3 per cent currently to 7 per cent by 2040.'<sup>47</sup>

### ***Other countries export uranium to India***

2.31 A number of submitters pointed out that India has already entered into a number of agreements with other countries to meet its demand for uranium supplies.<sup>48</sup> According to the Department of Industry, Innovation and Science, India currently sources the majority of its uranium supply from Russia, Kazakhstan and Canada.<sup>49</sup>

2.32 The Minerals Council of Australia agreed, noting that:

Australia already lags Canada who's first exports to India occurred in late 2015, following the conclusion of a contract for 3220 tonnes, concluded earlier in the year. In September 2016, India and the US moved closer to the planned construction of six reactors by Westinghouse with the two sides deciding to immediately commence the work on engineering and site design, and make an early conclusion of a competitive financing package. Just days ago, Japan and India concluded a nuclear cooperation agreement, opening the door for India to import Japanese nuclear technology.<sup>50</sup>

### **Committee view**

2.33 Submitters critical of the bill argued that it should not be passed until all the recommendations made by JSCOT have been implemented. The committee strongly disagrees with this view. The committee acknowledges the concerns raised by contributors, but believes many of the issues raised were addressed by JSCOT during its wide-ranging inquiry into the Australia-India Agreement and fall outside the more limited scope and intent of the bill.

2.34 Specifically, the committee is satisfied that the bill provides the certainty required to give effect to the Australia-India Agreement. It clarifies that decisions approving civil nuclear transfers to India are taken not to be inconsistent with, or have been made with due regard to, Australia's obligations relating to nuclear safeguards. That is its primary purpose.

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46 Minerals Council of Australia, *Submission 4*, p. 3.

47 Uniting Church in Australia, Synod of Victoria and Tasmania, *Submission 8*, pp 8–9.

48 For example: Minerals Council of Australia, *Submission 4*; Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*; and the Department of Industry, Innovation and Science, *Submission 6*.

49 Department of Industry, Innovation and Science, *Submission 6*, p. 1.

50 Minerals Council of Australia, *Submission 4*, p. 3.

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2.35 The committee is of the view that the amendments to the bill proposed by Mr John Carlson are not necessary. The committee is not convinced the bill uses a subjective rather than an objective standard. There is no reason why a person who is 'satisfied' that nuclear material will be subject to safeguards under the India-IAEA agreements if supplied to India has not reached that conclusion based on the objective facts.

2.36 The committee is satisfied that since 2008, India has met its commitments to support non-proliferation efforts, continue its moratorium on nuclear testing, separate its civil and military activities and accept IAEA safeguards. The committee notes that India is currently working with Australia to promote negotiations on a Fissile Material Cut-Off Treaty.

2.37 The committee notes that submitters critical of the bill are silent on the important foreign policy backdrop to Australia's nuclear trade with India. As the DFAT submission highlighted, Australia's relationship with India has changed fundamentally over the past five years, with a deepening of defence, security and economic ties: 'It is very much in Australia's interests to encourage greater, collaborative leadership by India in Indian Ocean and broader Indo-Pacific security'.<sup>51</sup>

2.38 It is in this context that the committee recognises the economic and security benefits to be gained from Australia's relationship with India, and civil nuclear transfers consistent with Australia's international obligations will come to form an important part of that evolving bilateral relationship. At the very least, increased uranium exports to India will boost employment opportunities in regional and remote Australia while helping to reduce India's carbon emissions. The committee commends the bill to the Senate.

### **Recommendation 1**

**2.39 The committee recommends that the bill be passed.**

**Senator Chris Back**  
**Chair**

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51 Department of Foreign Affairs and Trade and the Australian Safeguards and Non-Proliferation Office, *Submission 5*, p. 2.

