

Australia's Uranium and India: Linking Exports to CTBT Ratification

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Uranium mining and export have always been deeply divisive issues within Australia.¹ Of primary concern among the Australian public has been the reconciliation of uranium export with nuclear non-proliferation and disarmament. To that end, few decisions were as comprehensively unpopular with the Australian electorate as the one to open uranium exports to India while it remains a non-party to the Nuclear Non-Proliferation Treaty (NPT). In August 2007, Prime Minister John Howard decided to support the export of Australian uranium to India.² This policy was subsequently reversed when Kevin Rudd was elected Prime Minister before any agreement could be reached. After Rudd was ousted, Julia Gillard sought to change the Australian Labor Party (ALP) national platform to allow uranium export to India; a move that was especially unpopular in the Labor rank-and-file.³ The debate at the ALP National Conference saw the Labor Left faction come out uniformly against the move, with one Labor Senator beginning his dissenting speech with an unequivocal "Prime Minister, you are wrong" to the rapturous applause of those present.⁴ The most common argument made against exporting uranium to India has been that it undermines Australia's non-proliferation credentials by allowing export to countries that are not members of the NPT.⁵ Ultimately, the motion to grant an exception

¹ J. Falk, 'Preventing Proliferation: The Role of Australian Uranium', in D. Ball and A. Mack (eds.), *The Future of Arms Control* (Sydney: Australian National University Press, 1987), p. 253.

² Howard, in support of uranium export to India argued in 2007 that; "as well as assisting India to pursue economic development while addressing environmental challenges, the decision recognises India's strong non-proliferation record and will help to bring India more fully into the non-proliferation mainstream". S. de Tarczynski, 'Uranium Sales May Fuel Asian Arms Race', *Inter Press Service News Agency*, 26 August 2007, <<http://www.ipsnews.net/2007/08/australia-uranium-sales-may-fuel-asian-arms-race/>> [Accessed 22 February 2013].

³ The 2012 Lowy Institute Poll indicated that overall 61 per cent of people were against Australia exporting uranium to India, with only 33 per cent in favour. Of those who always vote Labor, it was 65 per cent against. See F. Hanson, 'Australia and New Zealand in the World: Public Opinion and Foreign Policy', *The Lowy Institute Poll 2012*, <http://lowyinstitute.cachefly.net/files/lowy_poll_2012_web3.pdf> [Accessed 22 February 2013].

⁴ K. Murphy, 'Labor Votes in Favour of Selling Uranium to India', *Sydney Morning Herald*, 4 December 2011. <<http://www.smh.com.au/national/labor-votes-in-favour-of-selling-uranium-to-india-20111204-1od53.html>> [Accessed 2 February 2013]

⁵ There were a total of sixteen speakers for and against the relevant Amendment 665A at the 2011 ALP national conference. At least one Labor MP spoke against the motion on the grounds that it would "leave ourselves open to pressure from every other country in the world on every other issue that they wish to invite debate on". See P. Hudson, 'Tough Guy Weeps over Nuclear Dangers', *Herald Sun*, 5 December 2011, <<http://www.heraldsun.com.au/news/victoria/tough->

to India passed on the conference floor by a slim majority, 208 in favour with 185 against.⁶ This handed Prime Minister Gillard an important victory, having taken some profound political risks. Clearly she believed there were significant national imperatives that justified the expenditure of limited political capital.

This comment argues that it is possible for a bilateral uranium export deal between Australia and India to support nuclear non-proliferation and disarmament objectives; and that arguments against this are based upon misconceptions regarding the role that uranium supply can play in shaping the nuclear behaviour of recipient states. Australia's uranium export policy should be conceptualised in terms of the nuclear legitimacy sought by and conferred upon recipient states. Applying this concept to the proposed agreement with India, it is recommended that export be linked to an undertaking by India to ratify the Comprehensive Nuclear-Test-Ban Treaty (CTBT), conditional on CTBT ratification by the United States.

The policy of linking uranium supply to nuclear non-proliferation began in 1977, when Prime Minister Malcolm Fraser announced that Australia should export uranium because its vast deposits acted as a “tangible reward” for NPT membership.⁷ The centrality of the NPT in Australia's policy was affirmed by linking it to the Article IV.2 undertaking to facilitate nuclear exchanges for peaceful purposes, thereby supporting directly the bargain inherent in the NPT. Since that time, a bipartisan policy has entrenched the view that being a major uranium supplier gave Australia “a lever” with which to influence other countries embarking on nuclear energy programs.⁸ As Michael Clarke has argued, “the core assumption of the Fraser Government's ‘uranium decision’—that Australia could use its uranium as an instrument of diplomatic leverage—has remained largely unquestioned by successive governments in Canberra”.⁹ In recent years this view has been challenged,¹⁰ with a large number of uranium suppliers gaining significant shares of the market in many importing states. Among the arguments put forward in support of Labor's policy shift was that exporting uranium exclusively to NPT states had become outdated in the case of India by the 2008 US-India Nuclear Cooperation Agreement. According to Prime

[guy-weep-over-uranium-dangers/story-fn7x8me2-1226213613927>](#) [Accessed 22 February 2013].

⁶ Murphy, ‘Labor Votes in Favour of Selling Uranium to India’.

⁷ M. Clarke, ‘The Fraser Government's “Uranium Decision” and the Foundations of Australia's Non-Proliferation Policy: A Reappraisal’, *Australian Journal of Politics and History*, vol. 58, no. 2 (June 2012), p. 230.

⁸ See *Ibid.*

⁹ *Ibid.*, p. 233.

¹⁰ M. Clarke, ‘The Third Wave of the Uranium Export Debate: Towards the Fracturing of Australia's Nuclear “Grand Bargain”’, in M. Clarke, S. Frühling and A. O'Neil (eds.), *Australia's Uranium Trade: The Domestic and Foreign Policy Challenges of a Contentious Export* (Surrey: Ashgate Publishing Limited, 2011), pp. 109-36.

Minister Gillard, Labor's national platform should change to "recognise that reality".¹¹ As Australia's uranium export policy environment shifts, it is necessary to critically analyse what role export decisions can play, if any, in restricting the proliferation of nuclear weapons.

The waiver granted to India through the Nuclear Suppliers Group (NSG) guidelines,¹² and the US-India Nuclear Cooperation Agreement, opened the door for a range of other uranium suppliers. At least nine other countries have negotiated or are in the process of negotiating nuclear cooperation agreements with India, including four of the five permanent members of the United Nations Security Council (UNSC).¹³ As Clarke observes, "while the substance of the domestic debate within Australia has shifted only slightly since the 1970s, the international picture has evolved considerably".¹⁴ Therefore, a categorical refusal by Australia to supply uranium to non-NPT states is no longer an effective means of supporting the non-proliferation regime.

This comment addresses the challenge of developing a new coherent uranium export policy that supports non-proliferation and disarmament objectives in two steps. First, it argues that the influence nuclear suppliers can exert to strengthen compliance with non-proliferation norms relates primarily to the legitimacy conferred to a recipient states' nuclear activities in the view of the international community. Here legitimacy is characterised by the recognition of a broad constituency (in this case the international community) that a given behaviour accords with "certain 'norms' and 'principles' which are deemed 'generally accepted'".¹⁵ In other words, legitimacy focuses on the recipient's self-perception and the perceptions held by other stakeholders of a given activity. In the case of uranium supply, this means that nuclear supply agreements confer an acceptance of nuclear

¹¹ J. Gillard, 'Transcript of Press Conference, Canberra', 15 November 2011, <<http://www.pm.gov.au/press-office/transcript-press-conference-canberra-19>> [Accessed 22 February 2013]. On the possible strategic and military benefits of the deal see R. Mishra, 'India-Australia Strategic Relations: Moving to the Next Level', *Strategic Analysis*, vol. 36, no. 4 (July-August 2012), pp. 657-62.

¹² '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 German to the Agency Regarding a "Statement on Civil Nuclear Cooperation with India"', International Atomic Energy Agency Doc INF/CIRC/734 (Corrected) (10 September 2008).

¹³ The exception on the UNSC is China. Negotiations for the US-India nuclear agreement started in 2005 and were concluded in 2008. For a survey of the US-India nuclear relationship see M. Jabeen and I. Ahmed, 'Indo-US Nuclear Cooperation', *Journal of South Asian Studies*, vol. 26, no. 2 (July-December 2011), pp. 411-29.

¹⁴ M. Clarke, S. Frühling and A. O'Neil, 'Introduction: Australia's Uranium Trade in Domestic and International Contexts', in M. Clarke, S. Frühling and A. O'Neil (eds.), *Australia's Uranium Trade: The Domestic and Foreign Policy Challenges of a Contentious Export* (Surrey: Ashgate Publishing Limited, 2011), p. 5.

¹⁵ S. P. Mulligan, 'The Uses of Legitimacy in International Relations', *Millennium—Journal of International Studies*, vol. 34, no. 2 (2006), p. 351.

behaviour upon the recipient, which is a more accurate descriptor than it being a power relationship between the supplier and recipient.

Second, this comment argues that framing the issue in terms of legitimacy can inform Australia's policy options with respect to negotiating a bilateral nuclear cooperation agreement with India. This could provide an answer to the challenge for Australian diplomats of determining how to link uranium export to India with non-proliferation and disarmament objectives. This can be achieved by relating Australia's export conditions to the nuclear legitimacy that India seeks, specifically legitimacy commensurate with the five nuclear-weapon states (NWS) permitted nuclear weapons under the NPT. It is proposed that India be asked to commit to ratifying the CTBT as soon as reasonably possible *after the US Senate* as part of a bilateral export deal. This would utilise the legitimacy conferred by nuclear supply in a way that supports non-proliferation norms.

This is possible because, in accordance with India's self-conception as an emerging great power, India desires equality of nuclear status with China and the United States.¹⁶ It is therefore unlikely that India will conclude any nuclear deal with Australia that enshrines preferential treatment of uranium supply to any other state, especially China. Conversely, it is likely that India will be sensitive to implications that it is not acting as a legitimate NWS as this would be inimical to a status of nuclear equality. India will therefore pay close attention to steps taken by other NWS toward ratification of the CTBT, in particular any movement by the United States and China, as this would place heavy pressure on India to follow suit. This reality has been acknowledged by India's Prime Minister, Manmohan Singh, who indicated in 2009 that "should the US and China ratify the CTBT, a new situation will emerge".¹⁷

A more aggressive bargaining strategy by Australia, especially one that treats uranium supply as a tool of coercion, cannot succeed. India has rejected Australia's calls to accede to the NPT as a non-nuclear-weapon state (NNWS), an action which would require complete dismantlement of its nuclear arsenal.¹⁸ Faced with two threatening nuclear powers on its borders (China and Pakistan), Australia's dogged insistence that India sign the NPT

¹⁶ E. Kavalski, *India and Central Asia: The Mythmaking and Relations of a Rising Power* (London: I B Taurus Publishing, 2010), p. 76.

¹⁷ Quoted in 'Japan Wants India to Sign CTBT; PM Puts Onus on US, China', *The Indian Express*, 29 December 2009, <<http://amrrakha.com/article/Japan-wants-India-to-sign-CTBT--PM-puts-onus-on-US--China.html>> [Accessed 22 February 2013]. See also, V. R. Raghaven, 'India May Ratify CTBT after US and China—Expert', *Daily News Bulletin* (Moscow), 7 September 2012.

¹⁸ According to Article IX.3 only countries which exploded a nuclear device prior to 1967 are permitted to accede to the NPT as a nuclear-weapon state.

has had a negligible impact on India's leadership, except to breed a certain degree of antipathy.¹⁹

Australia's export of uranium to China, while refusing India, has also been a sore point of contention. China's proliferation activities in Pakistan have been well documented,²⁰ while India argues that it has a strong non-proliferation record and has been arbitrarily punished through being excluded from joining the NPT as a NWS.²¹ From India's perspective, Australia has been far more insistent on other countries signing up to international treaties and far less concerned whether the parties abided by those commitments. This perceived double standard fostered significant distrust of Australia in India; more acutely felt by virtue of China remaining India's most powerful strategic rival.²²

Furthermore, the supply of uranium ore concentrate (UOC) from Australia (or any other supplier) is not a limiting factor on the nuclear weapons programs of other states. Even for states to which nuclear transfers are restricted, such as Pakistan and North Korea, acquisition of UOC to supply conversion, enrichment and reprocessing activities for a nuclear weapons program has not been a difficulty.²³ There is also a major disparity between the volumes of uranium required to power nuclear reactors and the finite amounts needed for military purposes. In 2006, then Foreign Minister Alexander Downer pointed out that:

The quantities of uranium required for a nuclear weapons program are relatively small, as little as five tonnes of natural uranium to produce one nuclear weapon. Such quantities of uranium are readily available in nuclear weapon states. By contrast, producing fuel for one 1,000 megawatt power reactor requires around 200 tonnes of natural uranium every year ... For a nuclear weapon state considering whether to proceed with nuclear power, therefore, the choice is not between using its uranium for nuclear weapons or for nuclear power—the quantities required for nuclear power are so much

¹⁹ S. Gordon, 'Implications of the Sale of Australian Uranium to India', Working Paper No. 410 (Canberra: Strategic and Defence Studies Centre, September 2008), pp. 1-15.

²⁰ See A. Davies, 'Australian Uranium Exports and Security: Preventing Proliferation', Strategic Insights Paper No. 28 (Australian Strategic Policy Institute, 31 August 2006), p. 18.

²¹ See Gordon, 'Implications of the Sale of Australian Uranium to India'.

²² See also R. Medcalf, 'Australia's Uranium Puzzle: Why China and Russia but not India?' *Fearless Nadia*, no. 1 (Spring 2011), p. 13; R. Medcalf, 'Powering Major Powers: Understanding Australian Uranium Export Decisions on China, Russia and India', in M. Clarke, S. Frühling and A. O'Neil (eds.), *Australia's Uranium Trade: The Domestic and Foreign Policy Challenges of a Contentious Export* (Surrey: Ashgate Publishing Limited, 2011), pp. 167-86.

²³ See generally Z. Mian, A. H. Nayyar and R. Rajaraman, 'Exploring Uranium Resource Constraints on Fissile Material Production in Pakistan', *Science and Global Security*, vol. 17 (2009), pp. 77-108; M. Kroenig, *Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons* (New York: Cornell University Press, 2010).

larger than the actual choice is whether to generate base load electricity with uranium, or coal, or gas.²⁴

Therefore, so long as electricity can be generated economically by means other than nuclear, there will always be ready substitutes for power generation should the supply of UOC become a concern. For the short to medium term, India has adequate supplies of uranium from alternative suppliers²⁵ as well as large indigenous reserves of thorium which may become an alternative source of nuclear fuel in the future.²⁶

As with other countries, India did not have problems sourcing enough UOC for military purposes, even prior to the 2008 US-India nuclear deal.²⁷ The NSG was originally formed, ironically, in response to India's so-called "Peaceful Nuclear Explosion" conducted in 1974. The aim was to get countries to "exercise restraint" when supplying enrichment or reprocessing technologies.²⁸ Of course, the NSG did not successfully prevent India or Pakistan from continuing nuclear weapons development, and their emergence as nuclear-armed states in 1998 occurred without exception to the NSG guidelines. It has long been recognised that control over enrichment and reprocessing technologies and expertise have had far more impact on the proliferation capabilities of states than restricting UOC. Indeed, enrichment or reprocessing have been the choke points for every nuclear weapons program.²⁹

²⁴ A. Downer, Submission No. 33.1, p. 11 to House of Representatives Standing Committee on Industry and Resources, Parliament of Australia, *Australia's Uranium—Greenhouse Friendly Fuel for an Energy Hungry World* (2006), reproduced on p. 439 <<http://apo.org.au/node/2418>>.

²⁵ See OECD Nuclear Energy Agency and International Atomic Energy Agency, *Uranium 2011: Resources Production and Demand* (Paris: OECD, 2012) p. 254. See also 'Uranium Supply to India Will Be Demand Based, Says Australia', *The Hindu: Business Line*, 17 May 2012, <<http://www.thehindubusinessline.com/industry-and-economy/government-and-policy/article3428360.ece>>. See also C. Moloney, 'Australian and Canadian Nuclear Policy' in M. Clarke, S. Frühling and A. O'Neil (eds.), *Australia's Uranium Trade: The Domestic and Foreign Policy Challenges of a Contentious Export* (Surrey: Ashgate Publishing Limited, 2011), pp. 186-204.

²⁶ India has 32 per cent of the world's known reserve of thorium. See Gordon, 'Implications of the Sale of Australian Uranium to India'.

²⁷ Z. Mian, A. H. Nayyar, R. Rajaraman and M. V. Ramana, 'Fissile Materials in South Asia and the Implications of the US-India Nuclear Deal', *Science and Global Security*, vol. 14 (2006), pp. 117-143; P. K. Kerr, 'U.S. Nuclear Cooperation with India: Issues for Congress', Congressional Research Service Doc RL33016, 26 June 2012, pp. 1-8.

²⁸ See 'Communication Received from Certain Member States Regarding Guidelines for the Export of Nuclear Material, Equipment or Technology', IAEA Doc INFCIRC/254 (February 1978), Appendix: Guidelines for Nuclear Transfers, para. 6.

²⁹ J. Ullom, 'Enriched Uranium versus Plutonium: Proliferant Preferences in the Choice of Fissile Material', *Nonproliferation Review*, vol. 2, no. 1 (1994), pp. 1-15. The June 2011 NSG rules restricting supply of enrichment and reprocessing technology demonstrate that these technologies have greater proliferation sensitivity than supply of other materials and equipment and therefore deserving of greater restriction, see D. Horner, 'NSG Revises Rules on Sensitive Exports', *Arms Control Today*, July/August 2011, <http://www.armscontrol.org/act/2011_%2007-

Despite a lack of evidence that restricting uranium supply diminishes the capacity of states to develop nuclear weapons, the NSG continues to place heavy restrictions on the transfer of uranium.³⁰ Given its limited impact on non-proliferation, it is curious that global uranium exports are so heavily restricted. There is also no appetite to lessen the restrictions placed upon the transfer of UOC, which is still viewed as a component of the global non-proliferation apparatus.

It is important not to attach too much strategic significance to UOC. Australia's export of UOC to China does not influence the Sino-Indian strategic balance, nor does it directly impact alliances or the course of strategic competition across the region. Yet this does not itself mean that controlling uranium export plays no role in influencing the behaviour of prospective recipient states. Where nuclear suppliers conclude agreements with a nuclear-armed state, they convey legitimacy on the recipient's nuclear status. For India, nuclear cooperation agreements remove diplomatic isolation, and having many such agreements raises India to the status of a de facto NPT NWS.³¹ Having sought and attained this recognition, India becomes incentivised to behave in a manner that accords with its new status as a responsible stakeholder in a stable nuclear order. Australia does have particularly stringent controls in its bilateral nuclear agreements, and therefore an Australia-India nuclear deal would help to most fully legitimise India as a NWS in the view of the international community.

An Australia-India Nuclear Agreement that Supports Non-proliferation and Disarmament

The prospect of Australia acknowledging India's status as a legitimate nuclear power may persuade India to undertake additional non-proliferation obligations, provided it results in an agreement comparable to Australia's agreements with China and the United States. India, like some other countries, views the possession of nuclear weapons as one symbol of importance on the international stage.³² Acceptance as a de facto NWS accords with Indian conceptions of being an emerging great power, and in

08/Nuclear_Suppliers_Group_NSJ_Revises_Rules_Sensitive_Exports> [Accessed 22 February 2013].

³⁰ See 'Communication Received from the Permanent Mission of Brazil Regarding Certain Member States' Guidelines for the Export of Nuclear Material, Equipment and Technology', IAEA Doc INFCIRC/254/Rev.9/Part 1 (7 November 2007), Appendix: Guidelines for Nuclear Transfers.

³¹ R. Huisken, 'Uranium Sales to India: What Should Australia's Price Be?', *Nautilus Institute for Security and Sustainability*, 10 April 2006, <<http://nautilus.org/apsnet/0612a-huisken-html/#n2>> [Accessed 22 February 2013].

³² S. M. Shuja, 'India and Nuclear Weapons', *American Asian Review*, vol. 19, no. 3 (Fall 2001), pp. 103-19.

seeking this status it follows that India would be willing to accept the rights and responsibilities that go with that position.

The key priority for Australia in any nuclear export agreement is ensuring adequate nuclear safeguards for its uranium and, to the extent possible, utilising its uranium to materially support nuclear non-proliferation and disarmament.³³ At first it appears as though Australia's bargaining position is seriously constrained. India has a wide range of alternative suppliers, does not require Australian uranium for its energy needs, and can potentially pressure Australia politically to expedite conclusion of an agreement. Since India will not place its nuclear weapons program at a disadvantage to the NPT NWS, it is unlikely that Australia can induce India to unilaterally join agreements (such as the CTBT).³⁴ At the same time, India may want to take care to avoid appearing *more* recalcitrant than the NPT NWS, as this would undermine their arguments regarding perceived double standards and their strong non-proliferation record.

To achieve a uranium export deal that supports the priorities of both Australia and India, this comment proposes that, as part of such a bilateral uranium export deal, India would state publicly that it will ratify the CTBT *once the US Senate does*. This is possible because it confirms India's status as a responsible nuclear power, while not requiring India to do anything unilaterally. This approach avoids the pitfall of making CTBT ratification a South Asian issue by considering India's broader nuclear relationship with China.³⁵ As China has already indicated it will ratify the

³³ All Australian obligated nuclear material (nuclear material derived from Australian uranium) would be subject to International Atomic Energy Agency (IAEA) safeguards of at least the 'item-specific' standard contained in *The Agency's Safeguards System*, IAEA Doc INFCIRC/66/Rev.2 (16 September 1968) ('INFCIRC/66'). See *Agreement between the Government of India and the International Atomic Energy Agency for the Application of Safeguards to Civilian Nuclear Facilities*, signed 2 February 2009, entered into force 11 May 2009 reproduced in IAEA Doc INFCIRC/754 (29 May 2009). Supply may also be conditional on India's ratification of the Additional Protocol to its safeguards agreement, which is currently before the Indian parliament, see P. Crail, 'IAEA Approves India Additional Protocol', *Arms Control Today*, April 2009; *Protocol Additional to the Agreement between the Government of India and the International Atomic Energy Agency for the Application of Safeguards to Civilian Nuclear Facilities*, signed 15 May 2009, attached to IAEA Doc GOV/2009/11 (25 February 2009). On the legal requirements for the application of IAEA safeguards in India for Australian uranium, see K. A. Robertson, 'The Legality of the Supply of Australian Uranium to India', *Security Challenges*, vol. 8, no. 1 (Autumn 2012), pp. 25-34.

³⁴ Segments of the strategic community within India have expressed concern that the May 1998 nuclear tests may not have yielded sufficient data to make further testing unnecessary but this view does not appear to be widely held, see A. V. Kumar, 'India and the CTBT: The Debate in New Delhi', *Bulletin of the Atomic Scientists*, 4 November 2009, <<http://www.thebulletin.org/web-edition/features/india-and-the-ctbt-the-debate-new-delhi>> [Accessed 22 February 2013]; H. V. Pant, 'India and Nuclear Arms Control: A Study of the CTBT', *Comparative Strategy*, vol. 21, no. 2 (2002), pp. 91-105.

³⁵ The United States has traditionally viewed India's ratification of arms control treaties as a South Asian issue, this may have contributed to previous diplomatic failures, see Pant, 'India and Nuclear Arms Control'.

CTBT when the United States does,³⁶ a refusal from India to do the same would leave its leaders exposed and undermine India's claim to nuclear legitimacy. India is aware that a norm against testing nuclear weapons exists and has a moratorium on nuclear testing.³⁷ If India fails to uphold its commitment to ratify within a reasonable time after the United States, then the legitimacy of India's nuclear status would be compromised in the eyes of the entire international community. In such an eventuality it would be up to the Australian government of the day, in consultation with other nuclear suppliers, to determine whether uranium supply to India should be suspended. Any action taken by Australia or the international community would be profoundly impacted by the circumstances in which the reneging by India occurred, such as whether Pakistan has ended its moratorium and resumed nuclear testing. In the interests of equitable treatment of China and India, the undertaking to ratify the CTBT would be conditional on ratification by the United States only.³⁸ As a practical matter, "a reasonable time" is likely to mean after China ratifies, or China and India could arrange to ratify around the same time.

A pledge by India to ratify the CTBT after US ratification would support non-proliferation and disarmament. This is because one of the biggest impediments to nuclear arms control is the linked US-China-India-Pakistan nuclear relationship. As insecurity regarding the credibility of US extended nuclear deterrence increases among America's Northeast Asian allies, deep cuts in US nuclear stockpiles become more difficult to achieve.³⁹ A lack of movement on disarmament, as well as the ongoing development of US ballistic missile defence, gives cover to China's nuclear modernisation and expansion.⁴⁰ Faced with the expanding nuclear capabilities of both China and Pakistan, India is placed under considerable domestic pressure not to fall behind. This interwoven nuclear relationship increases the likelihood of a destabilising nuclear arms race across the Asia Pacific region, while a commitment by both China and India to ratify the CTBT after the US Senate would help to minimise the probability of that outcome.

³⁶ K. Reif, 'The Case for the CTBT: Stronger Than Ever', *Bulletin of Atomic Scientists*, 9 April 2012, <<http://www.thebulletin.org/web-edition/columnists/kingston-reif/the-case-the-ctbt-stronger-ever>> [Accessed 22 February 2013].

³⁷ India released a statement from New Delhi about its non-proliferation and arms control commitments, focusing on its moratorium on nuclear testing, as part of its lobbying effort for being granted an exception to the NSG guidelines during the Plenary Meeting of the Nuclear Suppliers Group, Vienna, 4-5 September 2008: 'Statement by External Affairs Minister of India Shri Pranab Mukherjee on the Civil Nuclear Initiative', 5 September 2008, <<http://meaindia.nic.in/pmimd.geneva/?50031094>> [Accessed 22 February 2013].

³⁸ In this way, India does not have the advantage of its ratification being conditional on an additional party, namely China.

³⁹ See generally, R. Medcalf and F. Cunningham, *Disarming Doubt: The Future of Extended Nuclear Deterrence in East Asia* (Woollahra: Lowy Institute, 2012).

⁴⁰ T. J. Christensen, 'The Meaning of the Nuclear Evolution: China's Strategic Modernization and US-China Security Relations', *Journal of Strategic Studies*, vol. 35, no. 4 (August 2012), pp. 447-87.

Some have argued that exporting uranium to India, under any condition other than India's ratification of the NPT as a NNWS, would encourage Israel and Pakistan to remain outside the NPT in the hope of uranium supply being extended to them as well.⁴¹ Since India's ratification of the CTBT would be linked to this export agreement, it reinforces the fact that such supply is not without rules, but rather subject to new ones that better fit with evolving strategic circumstances.⁴² Commitments on ratification of the CTBT could become one necessary criterion upon which supply (or refusal of supply) to non-NPT states is based in the future.

An Indian undertaking to ratify the CTBT after the US Senate also increases the probability that the United States will ratify the CTBT in the future. With commitments from both Beijing and New Delhi, advocates of CTBT ratification in Washington would be able to argue that most of the world's population can be brought under a test ban regime with a single act of the US Senate. For Australia, receiving this undertaking from India as part of a bilateral nuclear cooperation agreement would mean that Australia's export of uranium to India would materially benefit nuclear non-proliferation and disarmament, in a manner distinct from India's nuclear agreements with any other uranium supplier.

The negotiation of a bilateral nuclear agreement should be part of a broader recalibration of understanding about the role Australia's uranium supply agreements can play in non-proliferation and disarmament. The reassessment of Australia's policy is underway within government⁴³ and Australians need to be made aware that the coercive power of uranium supply is very limited for impeding a state's nuclear weapons program. The uranium trade does play a role, however, in determining which countries are considered legitimate nuclear powers by way of acknowledgment from the international community. Being a major uranium supplier, Australia has a responsibility to accord its export policy with non-proliferation norms and to be mindful that its export of uranium confers a degree of legitimacy to the recipient's nuclear status. As part of being more responsive to evolving strategic circumstances Australia may move toward a more robust uranium export policy, and this should be the basis of Australia's nuclear cooperation with India.

⁴¹ Noted in G. Evans and Y. Kawaguchi, *Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers*, Report of the International Commission on Nuclear Non-Proliferation and Disarmament (Canberra: ICNND, 2009), pp. 96-9.

⁴² *Ibid.*, p. 100; the ICNND report also supports the supply of nuclear material and technology for civilian purposes to non-NPT states where they "satisfy strong objective criteria demonstrating commitment to disarmament and non-proliferation".

⁴³ G. Daley, 'Uranium Controls Point to India Deal', *Financial Review* (Sydney), 4 October 2012, p. 1; 'India, Australia May Finalise Uranium Safeguards Agreement Next Week', *The Economic Times*, 11 October 2012, <<http://economictimes.indiatimes.com/news/economy/foreign-trade/india-australia-may-finalise-uranium-safeguards-agreement-next-week/articleshow/16765833.cms>> [Accessed 22 February 2013].

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