

National Interest Analysis [2014] ATNIA 22

with attachment on consultation

**Agreement between the Government of Australia and the Government of India on
Cooperation in the Peaceful Uses of Nuclear Energy**

(New Delhi, 5 September 2014)

[2014] ATNIF 26

NATIONAL INTEREST ANALYSIS: CATEGORY 1 TREATY

SUMMARY PAGE

**Agreement between the Government of Australia and the Government of India on
Cooperation in the Peaceful Uses of Nuclear Energy
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Nature and timing of proposed treaty action

1. It is proposed that Australia enter into the *Agreement between the Government of Australia and the Government of India on Cooperation in the Peaceful Uses of Nuclear Energy* (the proposed Agreement) with India. The proposed Agreement was signed in New Delhi on 5 September 2014.
2. Pursuant to Article XIV of the proposed Agreement, it will enter into force on the last date upon which the Parties notify each other in writing that all domestic requirements for entry into force of the Agreement have been completed. It is anticipated that Australia will provide such notice as soon as practicable after consideration of the proposed Agreement by the Joint Standing Committee on Treaties (JSCOT).

Overview and national interest summary

3. The proposed Agreement would govern cooperation in peaceful uses of nuclear energy between Australia and India and create reciprocal obligations regarding the application of safeguards and physical security to the transfer and use of nuclear material, non-nuclear material, equipment, components and technology transferred between the Parties. It would also provide a framework for cooperation in other aspects of the peaceful uses of nuclear energy, including regulatory and technological advancements.
4. India is the second most populous country in the world, the third largest economy (in purchasing power terms) and the world's most populous democracy. Australia and India have a Strategic Partnership. The proposed Agreement would make a significant contribution to a further strengthening of bilateral ties between Australia and India and would mark a maturing in the relationship. Energy security is a priority for India and it is keen to settle uranium supply arrangements with new partners. Australia is well placed to meet these needs.
5. Nuclear cooperation agreements such as the proposed Agreement serve Australia's national interests by enhancing our commercial position as a supplier of an important energy resource commodity and by setting high international standards for its use through the application of strict conditions. The maintenance of multilateral, regional and bilateral arrangements that operate to counter nuclear proliferation is a matter of high priority for Australia.

Reasons for Australia to take the proposed treaty action

6. India has many new nuclear reactors under various stages of construction, the completion of which (around 2020) will nearly double its nuclear power generation capacity. India aims to provide 25% of its energy from nuclear power by 2050. By 2020, India will

require up to 2,000 tonnes of uranium oxide (t U₃O₈) each year in order to fuel its reactors. Accordingly, India is developing nuclear cooperation with major uranium suppliers.

7. For Australia, nuclear cooperation with India will create increased exports and jobs over the longer term. Australian uranium suppliers are well placed to take advantage of this significant market with established supply arrangements, regulatory frameworks already in place, and large known uranium reserves. According to the Bureau of Resources and Energy Economics, Australian uranium production is expected to increase at an annual average rate of 6% to around 8,900 t U₃O₈ in 2018-19. The export value of Australia's uranium industry is currently around \$700 million per annum, with India expected to be a large and growing market.

8. In recent years, India has prioritised the conclusion of international nuclear cooperation agreements, not only to secure civil nuclear technology and fuel, but also as an acknowledgement of India as a scientifically advanced and sophisticated country. Australia's agreement to negotiate a nuclear cooperation agreement has been an important catalyst for recent improvements in our relationship with India. Bringing the proposed Agreement into force would help to further consolidate and build on these improvements and be a landmark achievement in the bilateral relationship. It would further establish Australia's place as a trusted strategic partner of India and as a reliable supplier of resources and energy to India. It would have a particularly strong impact coming early in the term of Indian Prime Minister Narendra Modi who, since his election in May 2014, has prioritised making progress on civil nuclear cooperation and is committed to shoring up India's significant energy security needs.

9. The proposed Agreement reaffirms the respective commitments of Australia and India to nuclear non-proliferation and to the secure, safe and safeguarded use of nuclear energy for peaceful purposes, including the non-proliferation commitments by India mentioned in paragraph 10. Cooperation under the proposed Agreement will reinforce India's ongoing support for these commitments. Together with bilateral engagement such as through the Disarmament and Non-proliferation Dialogue, cooperation under the proposed Agreement will help to draw India more closely into the non-proliferation mainstream.

Nuclear safeguards

10. The 2008 decision of the Nuclear Suppliers Group (NSG) (a group of nuclear supplier countries that seeks to contribute to the non-proliferation of nuclear weapons through the implementation of guidelines for nuclear exports and nuclear-related exports) to allow nuclear supply to India provides a foundation for Australia to supply uranium to it as a country not party to the *Treaty on the Non-Proliferation of Nuclear Weapons* (NPT)¹. The NSG's decision was made on the basis of commitments by India to:

- a) separate civil and military nuclear facilities in a phased manner and place civil facilities under International Atomic Energy Agency (IAEA) safeguards;
- b) have in place an IAEA Additional Protocol on safeguards with respect to civil nuclear facilities;
- c) continue India's unilateral moratorium on nuclear testing;
- d) work towards conclusion of a Fissile Material Cut-off Treaty;
- e) refrain from transferring uranium enrichment and plutonium reprocessing technologies

¹ [1973] ATS 3

to states which do not have them and support international efforts to prevent their spread; and

f) match India's export controls with those of the NSG.

11. India is placing its civilian nuclear facilities under safeguards pursuant to its 2009 agreement with the IAEA (IAEA document INFCIRC/754) and its plans to separate its civilian and military nuclear facilities and programmes (INFCIRC/731). India expects to have all its civilian reactors under safeguards by the end of 2014. India's Additional Protocol with the IAEA entered into force on 25 July 2014. The proposed Agreement requires that Australian uranium supplied to India and derived nuclear material will be subject to safeguards under these IAEA safeguards agreements.

12. The negotiation of the proposed Agreement has been accompanied by development of a bilateral dialogue on related international issues. On 12 February 2014, Australian and Indian officials held an inaugural Disarmament and Non-proliferation Dialogue, which covered a wide range of issues including nuclear doctrine, disarmament and non-proliferation and export controls. There was agreement to hold such talks annually, with the next meeting to be held in India.

13. Australian uranium and nuclear material derived from its use (such as plutonium) is termed Australian Obligated Nuclear Material (AONM). Australia's bilateral nuclear cooperation agreements provide assurance that AONM is used solely for peaceful purposes and is not diverted to nuclear weapons or other military uses. At present, Australia has 23 such agreements in place, providing for the transfer of AONM to up to 41 countries, plus Taiwan. These agreements build on the IAEA's safeguards system in order to assure the peaceful and non-explosive use of AONM. They also serve Australia's nuclear non-proliferation security interests by establishing a high standard of safeguards and accountability for a significant proportion of the world's uranium in peaceful use. Australia's bilateral agreements require that AONM be subject to IAEA safeguards for the full life of the material.

14. The provisions of Australia's nuclear cooperation agreements, while broadly similar among the various agreements, differ according to the requirements of each case, including the status of relevant countries under the NPT. The provisions of the proposed Agreement would implement Australia's policies for the safeguarding and accountability of supplied nuclear materials for the case of India, including consistency with Australia's international obligations. The international framework (see paragraphs 10 and 11), within which Australia and India have negotiated the proposed Agreement, is unique to India, as is the IAEA safeguards model for India in INFCIRC/754.

15. The proposed Agreement includes the following key elements:

- a) assurance that AONM supplied to India will be used exclusively for peaceful purposes and will not be used for any military purpose (Article VII);
- b) assurance that all civilian nuclear facilities in India, and any AONM in India, will be subject to the *Agreement between the Government of India and the International Atomic Energy Agency for the Application of Safeguards to Civilian Nuclear Facilities* done at Vienna on 2 February 2009 and the Protocol Additional to that agreement, done at Vienna on 25 February 2009 (Article VII);
- c) the requirement for maintenance of safeguards on AONM when under the

jurisdiction or control of India (if the IAEA decides that the application of IAEA safeguards is not possible, the Parties shall consult and agree on appropriate verification measures) (Article VII);

- d) assurance that adequate physical protection measures are applied to all AONM during use, storage and transport and that such measures accord with accepted international standards (Article VIII);
- e) the requirement for prior Australian consent before any transfer by India of AONM to a third party (Article IX) and for any enrichment to 20% or more in the isotope uranium-235 (Article VI);
- f) the requirement that reprocessing of AONM to separate plutonium is limited to facilities dedicated to reprocessing safeguarded nuclear material under IAEA safeguards and under modalities described in the “Arrangements and Procedures Agreed between the Government of the United States of America and the Government of India” pursuant to Article 6(iii) of their *Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy*, done at Washington D.C. on 30 July 2010 (Article VI);
- g) rights for either Party to terminate the proposed Agreement on one year’s notice, and to cease further cooperation in the interim (Article XIV), which could be exercised if, for example, IAEA safeguards were violated, or following a nuclear test explosion;
- h) the provision for an Administrative Arrangement to be established between the appropriate governmental authorities of the Parties to facilitate implementation of the proposed Agreement (Article III); and
- i) the provision for consultation between the Parties in order to ensure the effective implementation of the proposed Agreement (Article XI).

Obligations

16. The key obligations on both Parties under the proposed Agreement would be to ensure that:

- a. any supplied or derived nuclear material, non-nuclear material², equipment, components and technology (items subject to the Agreement), as well as by-products, shall only be used for peaceful and non-explosive purposes (Article VII);
- b. safeguards shall apply to items subject to the Agreement in accordance with specified agreements each side has entered into with the IAEA (Article VII);
- c. adequate physical protection measures are applied to items subject to the Agreement consistent with international nuclear security standards (Article VIII).

17. Article II of the proposed Agreement outlines suggested fields of bilateral cooperation in the peaceful uses of nuclear energy. In addition to the supply of uranium, suggested areas for cooperation include the production and application of radioisotopes, as well as on measures to promote the safe, secure and safeguarded use of civil nuclear energy. Arrangements on such cooperation may address protection of intellectual property rights

² “Non-nuclear material” is described in the Annex to the proposed Agreement.

where appropriate. The terms of the proposed Agreement call for cooperation generally, but would not make cooperation in any specific field obligatory.

18. Article III, paragraph 2, requires that nuclear material remain subject to the proposed Agreement indefinitely while on the territory or under the jurisdiction or control of a Party, unless it is no longer usable for nuclear activities or has become practicably irrecoverable in accordance with IAEA determinations, or unless otherwise mutually determined. Article III, paragraph 4, requires also that nominated national authorities establish an Administrative Arrangement to facilitate effective implementation of the proposed Agreement. Australia's national authority would be the Australian Safeguards and Non-Proliferation Office (ASNO).

19. Article III, paragraph 5, requires each Party to establish and maintain a system of accounting for and control of items subject to the proposed Agreement. Both India and Australia maintain systems of accounting and control for nuclear material to meet IAEA safeguards requirements. Additional procedures to separately track nuclear material and other items subject to the proposed Agreement will be addressed in the abovementioned Administrative Arrangement.

20. Article IV requires the Parties to implement the proposed Agreement to facilitate trade between them, consistent with their national legislation, regulations and international obligations. The terms of the proposed Agreement call for cooperation generally, but would not make cooperation in any specific field obligatory. The Australian Government could suspend some or all cooperation under the proposed Agreement if, for example, serious problems arose with its implementation. (Termination of the proposed Agreement could also be possible through Article XIV.)

21. Article V commits the Parties to facilitate the visits of experts to implement written arrangements under the proposed Agreement. This obligation would be understood as applying consistent with applicable national laws and regulations.

22. Article VI, paragraphs 1 to 4, require that reprocessing of AONM in India could take place only under clear and robust conditions consistent with international best practice. Reprocessing of AONM could only be undertaken at a limited number of facilities which are dedicated to the reprocessing of safeguarded nuclear material and at which the detailed Arrangements and Procedures agreed between India and the United States on reprocessing apply. Those Arrangements and Procedures impose detailed safeguards conditions on the reprocessing of nuclear material and would apply equally to AONM. Any plutonium or other special fissionable material that is separated by reprocessing AONM would be used only to produce nuclear fuel for India's IAEA-safeguarded nuclear energy programme. India would be required to notify Australia in relation to the safeguards and physical security to be applied at the reprocessing facilities. The proposed Agreement also provides for consultations on the implementation of Article VI. A practical result of conditions in the Arrangements and Procedures is that reprocessing of AONM would take place in facilities using the PUREX chemical process, for which robust IAEA safeguards are well developed. Australia's consent would be required for any further reprocessing of AONM by India.

23. Article VI, paragraph 5, requires each Party to obtain consent from the other Party before enriching uranium to 20% or above in the isotope uranium-235. Uranium enriched to 20% or above in the isotope uranium-235 is categorised by the IAEA as material that can be used for the manufacture of nuclear explosives components without further enrichment.

24. Article VII, paragraph 1, obliges the Parties to use items subject to the proposed Agreement only for peaceful and non-explosive purposes. The definition of peaceful purposes in Article I makes clear that such purposes do not include use of items subject to the proposed Agreement in research on, or development of any nuclear explosive device, use in munitions such as depleted uranium munitions, or for other military purposes. Consistent with Australia's approach in other nuclear cooperation agreements, use in relation to supply of power for a military base, or production of radioisotopes to be used for medical purposes in a military environment, would not be regarded as a military purpose.

25. The peaceful use obligation in Article VII, paragraph 1, applies also to by-products from use and processing of AONM, including neptunium, americium and tritium. The Parties would commit to confidence building measures with respect to these materials through information exchange and IAEA monitoring.

26. Article VII, paragraph 2 requires that IAEA safeguards shall apply to India's civilian nuclear facilities in accordance with its INFCIRC/754 agreement with the IAEA. The inclusion of this provision in the proposed Agreement, together with India's commitment to identify and separate its civilian and military nuclear facilities and programmes, helps to ensure that the export of Australian uranium to India can be done consistently with the non-proliferation objectives of the NPT and the *South Pacific Nuclear Free Zone Treaty*³.

27. Article VII, paragraphs 3 and 4, provides that all items subject to the agreement are subject to the Parties' respective safeguards agreements with the IAEA, so long as items remain in the territory or under the jurisdiction or control of a Party. For India, this is the *Agreement between the Government of India and the International Atomic Energy Agency for the Application of Safeguards to Civilian Nuclear Facilities*, done at Vienna on 2 February 2009 and the Protocol Additional to that agreement done at Vienna on 25 February 2009. If the IAEA decided that the application of IAEA safeguards was not possible, the Parties would consult and agree on appropriate verification measures (Article VII, paragraph 5).

28. Article VIII obliges each Party to ensure adequate physical protection of nuclear material and other items subject to the proposed Agreement. This obligation would extend to international transport of items until responsibility is properly transferred to a receiving State. In addition to meeting international obligations under the *Convention on the Physical Protection of Nuclear Material*⁴, each Party would be required to apply measures of physical protection set out in the recommendations of IAEA document INFCIRC/225/Rev.5 (adopted by the IAEA in 2011).

29. Article IX requires each Party to seek prior written consent of the supplier Party before any transfer of items subject to the proposed Agreement to a third State. Each Party would maintain a list of third States to which transfers by the other are authorised and would notify the other of any such transfer.

30. Article X obliges the Parties to take reasonable measures, consistent with, *inter alia*, their respective legislation, to protect the confidentiality of information and technology exchanged under the proposed Agreement.

31. Article XI requires regular consultation between the Parties, to ensure the effective

³ [1986] ATS 32

⁴ [1987] ATS 16

implementation of the proposed Agreement, or to review matters relating to cooperation in the peaceful uses of nuclear energy.

32. Article XII requires the Parties to settle through negotiation any dispute about interpretation or application of the proposed Agreement.

33. The focus of nuclear cooperation agreements such as the proposed Agreement is the peaceful and secure use of nuclear material. Cooperation under the proposed Agreement is predicated on the commitment of both India and Australia to the best-practice nuclear safety arrangements and to international nuclear safety instruments. The proposed Agreement also includes a framework for future cooperation between Australia and India on a range of matters such as nuclear safety.

Implementation

34. The legislative framework already in place in relation to nuclear transfers is sufficient to provide for the terms of the proposed agreement. However, in light of the unique framework within which nuclear cooperation with India is proposed, the Government is considering legislation to clarify the legal basis for uranium transfers to India. No changes to the existing roles of the Commonwealth or the States and Territories would arise as a consequence of implementing the proposed Agreement.

Costs

35. The costs associated with the proposed Agreement would be limited to that for regulatory processes and bilateral consultation to facilitate its implementation, including occasional travel to India by ASNO officers. The Department of Foreign Affairs and Trade expects to be able to manage such costs within its departmental allocation to ASNO.

36. There are no additional costs for business or the community arising from the proposed Agreement.

Future treaty action

37. Article XIII of the proposed Agreement provides that the Agreement may be amended by written agreement between the Parties. Any such amendment would be subject to Australia's domestic treaty-making processes, including tabling in Parliament and consideration by JSCOT.

38. No future legally binding instruments connected with the proposed Agreement are envisaged at this stage. As noted at paragraph 18 above, the proposed Agreement would make provision for the conclusion of Administrative Arrangements to deal with the details of implementing the proposed Agreement. This is standard Australian practice where bilateral nuclear cooperation agreements are in place.

Withdrawal or denunciation

39. Article XIV provides that the proposed Agreement remain in force for an initial period of 40 years and will thereafter be automatically renewed for periods of 20 years, unless either Party gives the other Party 6 months' written notice of its intention not to renew. Alternatively, either Party may terminate the proposed Agreement at any time on one year's written notice to the other Party. The Party seeking termination on one year's notice would be

required to provide reasons for doing so, but the proposed Agreement would not place any limit on the reasons. The Party seeking termination would have right to cease further cooperation immediately if it determined that a mutually acceptable resolution of outstanding issues had not been possible or could not be achieved through consultations. Termination would not release either Party from obligations in respect of nuclear material transferred while the proposed Agreement was in force.

Contact details

Australian Safeguards and Non-Proliferation Office
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ATTACHMENT ON CONSULTATION

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CONSULTATION

40. The proposed Agreement would not have any general impact on businesses or Commonwealth Government agencies in Australia. The proposed Agreement should result in an increase in the volume of uranium exported from Australia over time.
41. A pre-meeting briefing was provided to the States and Territories through the Commonwealth-State/Territory Standing Committee on Treaties for its meetings in September 2013 and May 2014. No comments with respect to this proposed Agreement were registered by the Committee.
42. Commonwealth Government agencies consulted prior to and during the negotiations for the proposed Agreement (five formal rounds in 2013 and 2014) included the Attorney-General's Department, the Department of Prime Minister and Cabinet, the Department of Industry, the Department of Defence, the Australian Radiation Protection and Nuclear Safety Agency and the Australian Nuclear Science and Technology Organisation. Other relevant Commonwealth Government agencies were also briefed through meetings of the Nuclear Agencies Consultative Committee. No objections to the proposed Agreement were raised.