

Agreement with the People's Republic of China for Cooperation in the Peaceful Uses of Nuclear Energy

Purpose of the Nuclear Cooperation Agreement

- 3.1 *The 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* (the Nuclear Cooperation Agreement) will establish a broad framework for cooperation between Australia and China in respect to the peaceful uses of nuclear energy. The provisions contained in the Nuclear Cooperation Agreement are at least equivalent to those of Australia's bilateral nuclear agreements with the four remaining declared nuclear-weapon states.¹
- 3.2 The Nuclear Cooperation Agreement provides for collaboration across a range of peaceful applications of nuclear equipment and technology. Early areas of work may be in material science research at the Open Pool Australian Lightwater reactor (OPAL),² the research

1 The five nuclear weapon states as identified by NPT are: China, France, the Russian Federation, the United Kingdom of Great Britain and the United States of America. International Atomic Energy Agency, viewed 17 August 2006, <www.iaea.org/index.html>.

2 OPAL is a 20 megawatt pool reactor using low enriched uranium fuel, and cooled by water. OPAL is a multipurpose facility for radioscopic production, irradiation services and neutron beam research. Its compact core is designed to achieve high performance in the production of neutrons. The building is constructed from reinforced concrete; it is seismically qualified and has a metallic grillage for protection from a light aircraft crash.

reactor managed by the Australian Nuclear Science and Technology Organisation (ANSTO) located in Sydney.³ Other opportunities provided under the Nuclear Cooperation Agreement include collaborative projects in nuclear safeguards and security with the Australian Safeguards and Non-Proliferation Office (ASNO).⁴

- 3.3 The Nuclear Cooperation Agreement would ensure that safeguards obligations applicable to Australian Obligated Nuclear Material (AONM) are applied in accordance with the Nuclear Material Transfer Agreement. It would also ensure that appropriate safeguards are applied to material, equipment, components or technology transferred between the parties. Specifically, any nuclear material produced, processed or used in or produced through the direct and major contribution of material, equipment, components or technology transferred between Australia and China would become nuclear material subject to the Nuclear Material Transfer Agreement.⁵
- 3.4 ANSTO and ASNO would be responsible for the implementation of cooperation under the Nuclear Cooperation Agreement.⁶

Benefits of the Nuclear Cooperation Agreement

- 3.5 The Australian Government has stated that the Nuclear Cooperation Agreement would serve to strengthen Australia-China ties and benefit Australia by:
- creating a framework for cooperation with China in relation to nuclear science and technology, enabling collaborative work in nuclear research; and
 - providing for the transfer of material, equipment, components or technology, with requisite controls consistent with Australia's policies relevant to the prevention of the proliferation of nuclear weapons.⁷

Australian Nuclear Science and Technology Organisation, viewed 21 August 2006, <www.ansto.gov.au>.

3 NIA, para. 5; Mr Steven McIntosh, *Transcript of Evidence*, 4 September 2006, p. 32.

4 NIA, para. 5.

5 NIA, para. 9.

6 NIA, para. 10.

7 NIA, paras 6-7.

3.6 The Nuclear Cooperation Agreement is not expected to provide economic benefits in the short term, but rather serve to aid in the expansion of future collaborative research and development with China. The immediate benefits of the Nuclear Cooperation Agreement will be for research programs and the use of OPAL for advanced materials science.⁸

3.7 ANSTO informed the Committee about future cooperation with China in relation to the Nuclear Cooperation Agreement:

In relation to how the agreement will assist in future cooperation with China, the main benefit under this agreement is that, for the first time in our relationship with China, we will have a treaty-level understanding that intellectual property issues will be taken into account in specific areas of cooperation. That is obviously of importance to ANSTO and to Australia. We will be able to ensure that Australia receives a proper return from cooperation with China in particular areas. As I said to Mr Adams, the particular areas of cooperation are a little uncertain at the moment beyond the OPAL neutron beam instruments, although we are cooperating with them at the moment in looking at atmospheric pollution, for instance. We are building the world's highest tower for monitoring the atmosphere, in Tibet. That utilises some ANSTO facilities and it is under the auspices of the World Meteorological Organisation. As for specific things in nuclear technology, we will have to wait and see how that goes.⁹

3.8 The Committee received evidence about the expected economic and environmental impact of the Nuclear Material Transfer Agreement and the Nuclear Cooperation Agreement. Issues raised in relation to the impact of the treaties are discussed further in Chapter 4. Issues raised in relation to the safeguards included in the Agreements are discussed further in Chapter 5.

8 Regulations Impact Statement (RIS), p. 4.

9 Mr Steve McIntosh, *Transcript of Evidence*, 4 September 2006, pp. 38-39.

Australia's obligations under the Nuclear Cooperation Agreement

- 3.9 The key obligations on both Parties are to cooperate in the peaceful uses of nuclear energy and to ensure that no material, equipment, components or technology transferred under the proposed Nuclear Cooperation Agreement are ever used for, or diverted to, any military purpose including use in nuclear weapons, nuclear explosive devices or depleted uranium munitions.¹⁰
- 3.10 Article I requires that any cooperation in the peaceful uses of nuclear energy would be undertaken under the terms of the Agreement. Such collaboration in the transfer of nuclear material would be subject to the Nuclear Material Transfer Agreement, and the transfer of material, equipment, components or technology.¹¹
- 3.11 Article IV would oblige Parties to apply the requirements of the Nuclear Material Transfer Agreement to all nuclear material, equipment, components and technology transferred between Australia and China for peaceful non-explosive purposes, regardless of whether transferred directly or through a third country.¹²
- 3.12 Article V obliges Parties to develop cooperation in the peaceful uses of nuclear energy on the basis of equality and mutual benefit and in accordance with applicable laws in force in each country.¹³
- 3.13 Article VII obliges Parties to conclude specific written instruments for each particular field of cooperation. In the absence of such an agreed specific written instrument, cooperation under the Nuclear Material Transfer Agreement could not take place.¹⁴
- 3.14 Article IX would require that material, equipment, components and technology would remain subject to the Nuclear Material Transfer Agreement until certain specified conditions had been satisfied, namely that the material, equipment, components or technology was no longer useable or had been transferred beyond the territorial jurisdiction of the Party, unless the Parties otherwise agree.¹⁵

10 NIA, para. 11.

11 NIA, para. 12.

12 NIA, para. 13.

13 NIA, para. 14.

14 NIA, para. 15.

15 NIA, para. 16.

- 3.15 Article X obliges Parties to ensure that adequate physical protection measures, consistent with the current international standard, are applied to material, equipment, components and technology subject to the proposed Nuclear Material Transfer Agreement within their jurisdiction, and while in transport until responsibility is transferred to another State, as appropriate.¹⁶
- 3.16 Article XI obliges Parties to prevent the transfer of nuclear material, equipment, components and technology subject to the proposed Nuclear Material Transfer Agreement to a third party without first obtaining a peaceful use assurance and prior written consent from the other Party.¹⁷
- 3.17 Article XIII obliges Parties to respect the confidentiality requirements of the other Party.¹⁸
- 3.18 Article XIV obliges Parties to establish an Administrative Arrangement (AA) to ensure the maintenance of a system for control of material, equipment, components and technology subject to the proposed Nuclear Material Transfer Agreement.¹⁹

The Australian Government's consultation

- 3.19 ASNO informed the Committee that in 2004, the Australian Government was approached by both Chinese Government officials and Australian uranium producers²⁰ and asked to consider a formal Agreement to sell uranium to China.²¹ Australian uranium producers were consulted prior to the start of treaty negotiations with China.²²

16 NIA, para. 17.

17 NIA, para. 18.

18 NIA, para. 19.

19 NIA, para. 20.

20 These producers are: BHP Billiton (Olympic Dam Mine), Energy Resources Australia (Ranger Mine), Heathgate Resources (Beverley Mine), and other mines given approval to operate. RIS, p. 5.

21 Mr John Carlson, *Transcript of Evidence*, 4 September 2006, p. 33.

22 RIS, p. 5.

- 3.20 Commonwealth agencies²³ participated in negotiations held on 18-19 January, 28 February-1 March 2006, interdepartmental committee meetings held on 10 and 22 February, and contributed to briefings. Additional Commonwealth agencies were briefed through the Nuclear Agencies Consultation Committee on 4 May 2006. No objections to the Agreements were raised by Commonwealth agencies.²⁴
- 3.21 State and Territory Governments were consulted about the treaties through the Commonwealth-State/Territory Standing Committee on Treaties at its meeting on 17 May 2006. There has been no opposition to the treaties from any State, Territory or Federal Government organisations,²⁵ but again it should be noted that uranium is mined only in South Australia and the Northern Territory.
- 3.22 Public consultation commenced after a bilateral safeguards agreement with China was discussed at Senate Estimates hearings on 17 February 2005. On 9 August 2005, a press release was issued announcing that the Australian Government had decided to proceed with negotiations on a bilateral safeguards agreement with China. The Agreement and frequently asked questions and answers were made available on the ASNO website shortly after both Agreements were signed.²⁶
- 3.23 Public enquiries related to the Nuclear Cooperation Agreement and the Nuclear Material Transfer Agreement have been handled by ASNO, the North Asia Division of DFAT and the Uranium Industry Section of the Department of Industry, Tourism and Resources.²⁷
- 3.24 The Australian Government received 90 public enquiries in relation to the Agreements. Approximately 10 per cent of these were positive or neutral. Relevant Government Departments replied to enquiries that sought information (approximately 50%). Most enquiries raised concerns about human rights and freedom of expression in China. In responding, DFAT explained that the Australian Government's approach to pursuing human rights issues with China is directly
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23 These are: the Department of Foreign Affairs and Trade, Australian Safeguards and Non-Proliferation Office, Prime Minister and Cabinet, Attorney-General's Department, Department of Defence, Department of Industry, Tourism and Resources, Department of Education, Science and Technology and the Australian Nuclear Science and Technology Organisation. RIS, para. 5.

24 NIA Consultation Annex 3.

25 RIS, p. 6.

26 NIA Consultation Annex, para. 4.

27 NIA Consultation Annex, para. 4.

through discussion and practical cooperation. ASNO informed the Committee that where safeguards related issues were raised, published materials were drawn on, including ASNO's annual reports, to explain the operation of the nuclear non-proliferation regime, the work of the IAEA and the practical application of nuclear safeguards in the transfer and use of nuclear material.²⁸

Costs of implementation

- 3.25 Costs will be incurred for ASNO officers' travel to facilitate safeguards research and development, which will be absorbed by the Department of Foreign Affairs and Trade.²⁹
- 3.26 Cooperation by ANSTO would be funded from within the ANSTO budget. The cost of any proposals for cooperation would be assessed before cooperation in any specific field was carried out pursuant to Article VII of the Nuclear Material Transfer Agreement.³⁰

Implementing legislation

- 3.27 No new legislation or regulations are required to give effect to Australia's obligations under the Agreement. However, it is necessary to promulgate regulations pursuant to the *Nuclear Non-Proliferation (Safeguards) Act 1987* and the *Australian Radiation Protection and Nuclear Safety Act 1998* to add the Nuclear Cooperation Agreement to the list of prescribed agreements under the Acts.³¹
- 3.28 No legislative or regulatory changes will be required to the existing roles of the Commonwealth, States or Territories as a result of implementing the Agreement.³²

28 NIA Consultation Annex, para. 5.

29 NIA, para. 28.

30 NIA, paras 22-23.

31 NIA, para. 21.

32 RIS, p. 6.

Entry into force and withdrawal

- 3.29 The Nuclear Material Safeguards Agreement will enter into force 30 days after the date of the last notification between Parties that all domestic procedures have been completed for this Agreement and the Nuclear Material Transfer Agreement.³³
- 3.30 The treaty text of the Nuclear Material Transfer Agreement provides that it would remain in force for an initial period of 30 years. Either Party may terminate the Agreement through written notification. The Nuclear Cooperation Agreement would terminate automatically if the Nuclear Material Transfer Agreement were terminated. Termination would not release either Party from obligations in respect of material, equipment, components and technology transferred while the Agreement was in force.³⁴

Further discussion on the Nuclear Cooperation Agreement

- 3.31 The Committee also received evidence about the treaties' safeguards, namely, their estimated effectiveness and how they are expected to operate. Issues pertaining to the safeguards included in the Agreements are discussed further in Chapter 5.

33 NIA, para. 3.

34 NIA, para. 27.