



**JSCOT Inquiry into nuclear non-proliferation and disarmament**

**Question regarding bilateral safeguards agreements**

On 26 March Ms Parke addressed the following question to ANSTO:

“... what number of non-safeguards eligible facilities can process Australian obligated nuclear material under the terms of the bilateral agreements?”

This question was recently referred to ASNO, which provides the following answer:

1. Australia concludes bilateral safeguards agreements only with states that are party to the Nuclear Non-Proliferation Treaty (NPT). In the case of a non-nuclear-weapon state party to the NPT, IAEA safeguards apply to all nuclear material in that state. Accordingly, this question arises only in the case of bilateral agreements with nuclear-weapon states.
2. Under Australia’s bilateral agreements with nuclear-weapon states, the basic requirement is that Australian obligated nuclear material (AONM) may be used only for peaceful purposes. Further, AONM is to be subject to IAEA safeguards in accordance with the state’s safeguards agreement with the IAEA. The only exception to this latter requirement is under the existing (1990) agreement with Russia, discussed in paragraphs 4-5 below.
3. Under IAEA safeguards agreements with nuclear-weapon states, the state may designate those facilities for which it is prepared to accept IAEA safeguards inspections – these facilities are listed on the “eligible facilities list”. The situation with particular nuclear-weapon states is as follows:
  - (a) **France** designates on its eligible facilities list those facilities that have nuclear material subject to safeguards obligations, e.g. under bilateral agreements. The only facility relevant to processing of AONM which is not eligible for IAEA safeguards is the Comurhex conversion facility. Comurhex is under Euratom safeguards. That Comurhex is not on the eligible facilities list is consistent with the IAEA’s longstanding practice (recently changed for non-nuclear-weapon states) that the “starting point” for safeguards inspections is at the end of the conversion process. Substitution applies to uranium intended for conversion to uranium hexafluoride at the Comurhex facility, i.e. an equivalent quantity of unobligated uranium hexafluoride at a facility on the eligible facility list is designated as AONM.
  - (b) **UK** designates all civil facilities on its eligible facilities list, there are no “ineligible” civil facilities.
  - (c) **US** designates all civil facilities on its eligible facilities list. Accordingly, as with the UK, there are no “ineligible” civil facilities.
  - (d) **China** The nuclear transfers agreement requires that AONM only be processed or used in facilities that are included in the Delineated Chinese Nuclear Fuel Cycle Program. These facilities are determined by mutual decision of the Australian and Chinese implementing authorities, and must be on the IAEA eligible facilities list. There is an exception in the case of uranium conversion, where the agreement expressly provides for substitution – an equivalent quantity of unobligated uranium hexafluoride at a facility included in the Delineated Chinese Nuclear Fuel Cycle Program is designated as AONM. This mechanism was explained during JSCOT’s examination of this agreement.

4. **Russia** The 1990 agreement with Russia provides for AONM to be converted, enriched and/or fabricated into fuel on behalf of third countries. AONM may not be used in Russia, and following processing, all AONM is to be retransferred expeditiously from Russia to an Australian bilateral agreement partner (with the exception outlined in paragraph 5 following). There is no requirement for the conversion, enrichment or fuel fabrication facilities to be on the IAEA eligible facilities list. The 1990 agreement formalised “all-in/all-out” arrangements that had previously applied.

5. Under the 1990 agreement, AONM is permitted to remain in Russia provided it is placed under the Russia/IAEA safeguards agreement. This provision is relevant to “tails” arising as a by-product of the enrichment process. Tails from enrichment under this agreement may be stored at the Angarsk enrichment plant, which is on the IAEA eligible facilities list.

6. The 2007 nuclear cooperation agreement with Russia, which has not yet been ratified, is intended to replace the 1990 agreement. The 2007 agreement requires that AONM only be processed or used in facilities that are included on the IAEA eligible facilities list and that are determined by mutual decision of the Australian and Russian implementing authorities. There is provision for an exception, where it is mutually determined that for operational reasons it is necessary to undertake conversion and/or enrichment at a facility that is not on the IAEA eligible facilities list. In this case, substitution provisions apply – equivalent unobligated material at a facility that meets the requirements set out in the second sentence of this paragraph is to be designated as AONM. This mechanism was explained during JSCOT’s examination of this agreement.

Australian Safeguards and Non-proliferation Office  
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