

15 April 2015

## **Australia-India Nuclear Cooperation Agreement**

**Treaty tabled on 28 October 2014**

### **Supplementary Submission for JSCOT Review – John Carlson**

This supplementary submission responds to **Submission number 22** from the Department of Foreign Affairs and Trade, which provided explanations on the operation of the proposed agreement following JSCOT's hearing of 12 February 2015.

I have not attempted to address all the points with which I take issue in these explanations. The particular points I wish to draw to JSCOT's attention are as follows.

#### **1. Separation of India's civil and military nuclear activities**

DFAT's explanation of India's "separation plan" is confused. DFAT's statement that the plan provides for 22 facilities to be placed under IAEA safeguards is not correct. Actually India undertakes to identify and place under safeguards 14 out of 22 thermal reactors in operation or under construction as at the date of the plan (2005), together with a number of *upstream* facilities (conversion, fuel fabrication, fuel storage) linked to these reactors. To date India has placed a total of 22 facilities under safeguards – the 14 reactors plus 8 upstream facilities. India excluded eight heavy water reactors from the separation plan, these are the eight unsafeguarded reactors referred to by DFAT.

India reserves as its sole determination whether additional facilities will be added to the list of IAEA safeguarded facilities. In the case of imported facilities, India will be obliged by the suppliers to place these under safeguards. For indigenous facilities, such as enrichment facilities, fast breeder reactors and other power reactors, India will take into account "... the nature of the facility concerned, the activities undertaken in it, the national security significance of materials and the location of the facilities ..." when considering which to add to the list of safeguarded facilities.

While the DFAT explanation refers to only eight unsafeguarded facilities (namely the eight heavy water reactors), there are already other reactors and associated facilities excluded from safeguards, and there may be many more unsafeguarded facilities in the future decades over which the agreement is intended to apply.

DFAT gives no explanation for its assertion that "AONM cannot be used in these unsafeguarded reactors." This assertion cannot be reconciled with the texts of the Australia-India and India-IAEA agreements. The proposed agreement requires AONM to be "subject to IAEA safeguards in accordance with" the India-IAEA agreement.<sup>1</sup> As I have explained in previous submissions, the India-IAEA agreement expressly allows for safeguarded material to be used in normally unsafeguarded facilities.<sup>2</sup> The IAEA will apply safeguards at these facilities temporarily while safeguarded material is present, but the IAEA agreement sets out

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1. Article VII.4.

2. See e.g. Articles 11(f), 14(b), 25.

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circumstances in which India can obtain, free of safeguards, plutonium that has been produced using safeguarded material.<sup>3</sup>

Perhaps DFAT is relying on the provision in the Australia-India agreement that items subject to the agreement may be used only for *peaceful purposes*.<sup>4</sup> However, this does not exclude use in normally unsafeguarded reactors – the fact they are unsafeguarded does not mean that they are necessarily non-peaceful, otherwise the IAEA agreement would not allow safeguarded material to be used in these facilities.

## **2. Flexibility to move material between safeguarded and unsafeguarded programs**

This has been partly discussed under the previous heading – the two topics are closely linked.

DFAT says that India cannot legally use its safeguarded program to further any military purpose. The problem, however, is one of proof. Once material is removed from temporarily safeguarded facilities and removed from safeguards – which the IAEA agreement allows India to do<sup>5</sup> – the IAEA and outside governments will lose visibility of what happens to that material.

DFAT asserts that the relevant provisions have been rarely used under similar IAEA agreements with other countries and are “unlikely to be used in India.” If it is the case that such provisions have been rarely used, the reason is that safeguarded material is not usually supplied to countries with these agreements, except in the form of fuel assemblies which are designed and supplied for specific, safeguarded, reactors (and are not suited for use in other facilities). The claim that the provisions are unlikely to be used in India is not convincing. It has been Australia’s practice in nuclear agreements to exclude activities that are unacceptable to us without depending on any judgment about likelihood (considering the many decades the agreement will operate, any such judgment will be speculative). If India has no intention of using these provisions with AONM, it should have no difficulty in formally confirming this.

The proposed agreement should have followed all other Australian agreements by limiting AONM to facilities that are designated for IAEA safeguards. An exchange of letters with India to this effect would resolve this particular concern.

## **3. Accounting and tracking**

### **4. Indian facilities eligible to use AONM**

DFAT appears to be acknowledging the concerns raised in my previous submissions, without saying anything specific about how these concerns will be addressed. The administrative arrangement is of fundamental importance both to whether the agreement will work satisfactorily and whether it will enable ASNO to meet statutory requirements. It is imperative for the administrative arrangement to be made public, or at least be made available for JSCOT review, when the text is concluded.

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3. See Article 25.  
4. Article VII.1.  
5. Article 30(b).

## **5. Consent rights**

DFAT says the Australian understandings on how the consent provisions of the proposed agreement are supposed to operate have been discussed with India and are set out in the National Interest Analysis. DFAT's explanation, however, does not make clear whether India shares Australia's understandings. If the proposed agreement had applied Australia's usual language there would be no room for doubt about its interpretation. It is of concern that this agreement is not clearly drafted – DFAT's explanation does little to assuage these concerns.

## **6. Australia's non-proliferation standards**

DFAT's explanation that "Australia and India had different perspectives or goals for the agreement" is not reassuring, and highlights why the many concerns raised in submissions to JSCOT need to be properly addressed.

The assertion that "the final result is at least as strong as any other country has negotiated with India" is not correct – the US agreement is stronger in important respects, especially the limiting of material to facilities that have been submitted to IAEA safeguards, and the provisions on return of material.

## **7. Right to ask for IAEA reports**

As discussed in my first submission, this was a shorthand way of referring to Australia having the right to ask for the IAEA's safeguards findings as they might relate to AONM. Other Australian agreements provide for this right. DFAT admits that India would not agree to this.

DFAT's explanation that Australia would have access to reports to the IAEA Board of Governors on safeguards compliance is totally unconvincing. Apart from the annual and very general Safeguards Implementation Report, only major safeguards violations are reported to the Board of Governors – we must hope that India's performance never reaches the point where such reports are made. Australia has a strong interest in knowing of safeguards problems affecting AONM before they become major violations. It is disturbing that India is unwilling to allow this.

It is equally disturbing for ASNO to admit that the IAEA's reports to India are "rudimentary" and do not include material balance evaluations. The way DFAT has phrased this is misleading – it implies this may be some problem on the part of the IAEA, but actually the problem is that India is not applying contemporary safeguards accounting. The reason why the IAEA is unable to prepare material balance evaluation reports is that India is not performing material balance accounting. As I mentioned in an earlier submission, the IAEA is in the process of introducing contemporary nuclear accounting to India. These circumstances make it all the more important for Australia to be able to find out from the IAEA how Indian nuclear accounting works in practice.

## **8. Safeguards and other commitments by India**

DFAT's claims that India is performing "well" on the various commitments listed does not stand up to scrutiny. For example, this is patently incorrect with regard to the IAEA's

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*additional protocol* for strengthening safeguards. In its agreement with the US India undertook to apply the additional protocol to its civilian nuclear facilities. However, even a cursory reading of India's additional protocol will show that, contrary to India's commitment (and DFAT's narrative), Indian facilities have been excluded from the scope of this protocol.

As to India's separation of military and civilian programs, this can hardly be described as satisfactory, in view of the number of facilities which India has chosen to leave outside safeguards and the provisions in the India-IAEA agreement allowing movement of nuclear material in and out of the safeguarded program.

This are other areas referred to by DFAT where India can hardly be described as performing "well". For example, although India is maintaining its unilateral nuclear test moratorium, it is one of only three Annex 2 states that have not signed the CTBT (the others being Pakistan and North Korea), and it refuses to allow the installation of CTBT monitoring stations in India. As regards its commitment to work towards a fissile material cut-off treaty, in fact India is one of the few states (again, in the company of Pakistan and North Korea) still producing fissile material for weapons.

DFAT makes the curious statement that "the frequency and intensity of IAEA inspections on India's civil nuclear facilities is (sic) greater than for most NPT parties." This is described as a "benefit" – the implication seems to be that somehow this gives greater reassurance about the situation in India than is the case in other countries. However, the reason for the intensity of IAEA safeguards in India is that India's indigenous power reactors are of the "on-load refuelling" type. These require more intensive safeguards, compared with typical power reactors (light water reactors), because they present much higher proliferation risk. Fortunately only a few countries operate on-load refuelling reactors.

### **Recommendation to JSCOT**

As is apparent from the comments in this submission, I do not consider that DFAT's responses have resolved the concerns which I and others have raised in our submissions to JSCOT. I am firmly of the view that, unless the proposed agreement is revised along the lines discussed in my submission 1.4 of 17 February 2015, there is only one way that Australian uranium can be supplied to India consistent with legal requirements for AONM to be identifiable and accounted for, and the policy position that AONM must not contribute to military purposes. This is set out as follows:

1. Provided the administrative arrangements on tracking recently agreed in principle between United States and Indian officials are satisfactorily concluded, Australian uranium may be supplied to India only after enrichment and fabrication into fuel assemblies in the United States. Compared with uranium in "bulk" form, fuel assemblies are readily identifiable and trackable.
2. Such fuel assemblies would be transferred to India under both the US-India agreement and the Australia-India agreement (i.e. the low enriched uranium contained therein would be "dual-flagged", as both AONM and USONM). Coverage by the US-India agreement would make up for most deficiencies in the Australia-India agreement, e.g. the US-India agreement excludes the possibility of safeguarded material being used in facilities not subject to permanent IAEA safeguards.
3. Fuel assemblies transferred to India under the US-India agreement would be limited to use in US-supplied reactors. Under the US-India administrative arrangements,

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India will supply information to the US sufficient for the US to be able to track the assemblies and material contained therein. It will be necessary for ASNO to establish arrangements with its US counterpart for the sharing of information required to track AONM.

4. This solution is not perfect – if the fuel assemblies are reprocessed in the future, both the US and Australia will face the problem of how to track material that is in bulk form. However, once the reprocessed material is fabricated into new fuel assemblies these will be covered by the US-India tracking arrangements. One can hope that by the time reprocessing takes place India will have brought its nuclear accounting practices into line with international practice.
5. It might be possible to permit the supply of AONM to India after enrichment and fabrication in a country other than the US, provided the country concerned has an agreement and supporting arrangements that replicate all the conditions applying under the US-India agreement.