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The Hon Richard Marles MP
Chair
Joint Standing Committee on Treaties
Parliament House
CANBERRA ACT 2600

Dear Chairman

On Monday 13 May 2013, I along with colleagues from the Department of Foreign Affairs and Trade (DFAT), Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Department of Resources, Energy and Tourism (DRET), and the Australian Nuclear Science and Technology Organisation (ANSTO), appeared before the Joint Standing Committee on Treaties in relation to the proposed Australia-United Arab Emirates nuclear cooperation agreement. During the hearing the Committee asked ASNO/DFAT, DRET and ARPANSA to respond formally to seven questions on notice. Attached are the responses to these questions.

Yours sincerely

Dr John Kalish
Assistant Secretary

1. Explain the differences between the provisions on non-compliance and repatriation of nuclear material in the Russia and China nuclear agreements and those in the proposed UAE nuclear agreement.

The Australia-China Nuclear Transfer Agreement, Australia-Russia Nuclear Cooperation Agreement and proposed Australia-UAE Nuclear Cooperation Agreement all prescribe the following rights of response that could be taken by one party in the event of a breach by the other party of key provisions of these agreements or non-compliance with their respective IAEA safeguards arrangements: (a) require the party in breach to take corrective steps; (b) suspend or cancel further transfers of nuclear material; (c) if corrective steps are not taken by the party in breach within a reasonable time, require that party to return nuclear material subject to the agreement.

In the unlikely event of these rights of response being invoked, the proposed Australia-UAE agreement elaborates the processes and considerations that would apply in more detail than do the existing Australia-China Nuclear Transfer Agreement and Australia-Russia Nuclear Cooperation Agreement. However, these textual differences in the proposed Australia-UAE agreement, when assessed against the Russia and China agreements, do not narrow or constrain Australia's rights to respond to non-compliance.

For example, the proposed Australia-UAE agreement is more prescriptive on the role of arbitration in determining non-compliance with the agreement, thereby enabling the right of return. However, dispute resolution by arbitration is available under the Russia and China agreements and affords the parties the opportunity to contest their non-compliance.

The proposed Australia-UAE agreement also differs from the other two agreements by requiring the supplying party to assess whether any non-compliance by the recipient party was wilful or deliberate and could be rectified in considering whether to invoke the right to suspend or cancel further transfers of nuclear material, or to require the return of nuclear material. Although not explicitly referenced in the other two agreements, these factors could form part of our considerations when deciding on corrective steps under any agreement.

The proposed Australia-UAE agreement notes that a determination of non-compliance by a party with its safeguards obligations under the agreement would be based on a finding of non-compliance by the IAEA Board of Governors. The IAEA is the appropriate body responsible for verifying a State's compliance with its safeguards obligations. Although not explicitly referenced in the Russia or China agreements, Australia could similarly rely on such a finding in determining non-compliance with safeguards obligations under those agreements.

In determining whether to exercise a right of return of Australian Obligated Nuclear Material (AONM), the proposed Australia-UAE agreement requires consideration be given to whether the nuclear material has third party obligations requiring consent from that third party. This would occur under a scenario whereby the Australian nuclear material was supplied to UAE via a third country in Australia's network of agreements for processing for fuel, and that country had its own nuclear cooperation agreement with the UAE. Although this is not explicitly referenced in the Russia or China agreements, as nuclear supply is multinational in nature, third party consent could nevertheless be a necessary consideration in those instances.

2. How does the obligation in relation to repatriation of nuclear materials in the instance of a breach or of non-compliance with the treaty relate to or interact with the prohibition on the importation of radioactive substances which was legislated in parliament last March? The Customs Act and the National Radioactive Waste Management Act 2012 says that these nuclear materials cannot be brought back. Would the conditions of the bilateral agreement override the requirements in the aforementioned acts?

All of Australia's bilateral nuclear cooperation agreements include provisions for responding to incidences of non-compliance with the relevant agreement. The available responses range from negotiated corrective steps, suspension or cancellation of supply, and the right to have Australian Obligated Nuclear Material (AONM) returned. In the unlikely event of a serious breach of an agreement it would be a decision for the Australian Government of the day as to which approach it would take, depending on the nature of the breach, whether corrective steps have been taken within a reasonable time by the party in breach and the prevailing circumstances of the time. Nuclear fuel supply is multinational in nature, and most fuel elements contain a mixture of several suppliers' nuclear material. A breach of an Australian agreement would likely therefore be a breach of other suppliers' agreements, many of whom have similar options for responses. Consequently, any decision to have AONM removed from a customer country would likely involve coordination with other suppliers. The country to which the fuel elements were removed could be any one of several suppliers, not necessarily Australia.

If a circumstance arose whereby an Australian Government chose to invoke the right to have AONM returned and stored in Australia this would need to be done in accordance with the relevant laws at the time. Under current laws, the *Customs (Prohibited Imports) Regulations 1956* would apply to the importation of fresh or spent nuclear fuel. As structured, Regulation 4R does not establish an absolute prohibition against importing radioactive substances such as this. Rather, it requires permission in writing granted by the Minister for Health and Ageing or an authorised officer. An authorised officer means the CEO of ARPANSA or an APS employee assisting the CEO that has been appointed by the Minister.

The *National Radioactive Waste Management Act 2012* does not prohibit the importation of radioactive material into Australia; however, the Act limits use of a national radioactive waste management facility to *controlled material* that is of *domestic origin*.

The *National Radioactive Waste Management Act 2012* specifies that:

- *controlled material* means controlled material within the meaning of the *Australian Radiation Protection and Nuclear Safety Act 1998* that is of domestic origin, but does not include high level radioactive material or spent nuclear fuel; and
- controlled material is *of domestic origin* if it has been used in Australia, generated by activities in Australia, or sent to Australia under contractual arrangements relating to the conditioning or reprocessing of ANSTO spent nuclear fuel (within the meaning of the *Australian Nuclear Science and Technology Organisation Act 1987*).

3. What is the estimated impact on Australian jobs and Australian export revenue, where the uranium mining industry currently accounts for 0.015% of employment and 0.29% of export revenue, if Australian uranium producers provide 100% of the UAE's anticipated uranium needs for all four reactors, estimated to be 1000 tonnes per year once the four reactors are operational?

The UAE has announced contracts for the supply of uranium with a number of suppliers, including Rio Tinto and Uranium One, which have uranium production facilities in Australia. It is a commercial decision for companies regarding where to source uranium to supply these contracts.

If 1,000 tonnes of Australian uranium were supplied per year at the current spot price of around USD \$41/pound, export revenue would be around AUD \$94 million per year at the exchange rate of AUD\$0.98. However an increase in revenue would only occur if new production was used to fulfil sales to the UAE. It should also be noted that long-term supply contract prices can be substantially different from the current spot price and the spot price can vary considerably over the period of years.

Estimates of employment in the Australian uranium industry vary, largely due to the Olympic Dam mine being poly-metallic (extracting other metals besides uranium), and therefore having employees who could be ascribed to more than one sector of the mining industry. If all employees of Olympic Dam are included as being employed in the uranium industry, the Department of Resources, Energy and Tourism estimates current total direct employment in the Australian uranium industry at 4,200 people. The impact on job numbers is dependent on how the 1,000 tonnes would be supplied. Given that all production is currently exported, unless this tonnage was not sent to other customers in order to supply the UAE, the 1,000 tonnes used as an indicative figure in our calculation would need to come from an increase in production from an existing mine, or from a new mine. The employment outcomes are difficult to quantify and would depend on the particular characteristics of the mine including deposit type, locality, mining method and other factors. However, if the Toro Energy Wiluna Project is used as a general reference, the anticipated annual production rate of 1,200 tonnes U₃O₈ will require a construction workforce of around 350 and an operational staff of 170 people (Wiluna Uranium Project - Environmental Scoping Document, Toro Energy Limited, June 2010).

4. Do you agree with the Nuclear Threat Initiative's (NTI) assessment in their NTI Nuclear Materials Security Index of the UAE's institutional capacity to meet its commitments for nuclear non-proliferation? If Australia agrees with the assessment, what, if any, action should be taken?

The Nuclear Threat Initiative (NTI) Nuclear Materials Security Index was not designed to evaluate institutional capacity to meet nuclear non-proliferation commitments; it is intended to assess the status of nuclear materials security conditions around the world. However, the index does evaluate some measures relevant to nuclear non-proliferation commitments.

The January 2012 NTI Index, the most recent ranking, ranks the UAE equal 9th (with Slovakia) overall, out of 144 countries without weapons-usable nuclear material. In relation to institutional capacity, some aspects of which are covered under the NTI Index's "Domestic Commitments and Capacity" indicator, the UAE ranks equal 23rd (with New

Zealand). The NTI Index score for Domestic Commitments and Capacity is determined by three sub-indicators: UNSCR 1540 implementation; domestic nuclear materials security legislation and; safeguards adoption and compliance.

UAE currently has a Small Quantities Protocol (SQP) (scored under the NTI's safeguards adoption and compliance sub-indicator) consistent with the small amount of nuclear material present in the UAE. Before any reactor in the UAE contains nuclear material, the UAE will be rescinding its SQP and will then become subject to the full requirements of its comprehensive safeguards agreement (CSA) with the IAEA. The UAE's rank under the "Domestic Commitments and Capacity" indicator will rise when they rescind the SQP.

According to the IAEA Integrated Nuclear Infrastructure Review mission in January 2011, the UAE Federal Authority for Nuclear Regulation "...is building its capabilities to match the nuclear power programme development, strengthening its safeguards competence and increasing its resources to fulfil the State's obligations under full-scope CSA (without SQP) and additional protocol."

The IAEA Integrated Regulatory Review Service Mission in December 2011 noted that the UAE's "... international engagement is driven by the ambition to achieve the highest standards of performance in the nuclear sector, including safeguards and non-proliferation, as clearly laid out in the [UAE] Nuclear Policy".

5. Can you provide a list of bilateral agreements between Australia and the UAE?

A list of bilateral agreements between Australia and the UAE was tabled with the JSCOT Secretariat on 13 May 2013 (a copy is at Attachment A).

6. Do you know what relationships, if any, UAE has on a technical basis with Pakistan, Iran or North Korea?

The UAE maintains diplomatic relations with all three countries. Based on the available information, the UAE does not engage in any nuclear-related technical cooperation with North Korea, Pakistan or Iran.

7. Do you know if the UAE has joined Qatar and Saudi Arabia, for example, in providing funding or arms to Syrian rebels?

The UAE Government has announced that it would provide a range of humanitarian assistance, primarily to Syrian refugees in Jordan. Most recently, on 30 January 2013 at a UN pledging conference held in Kuwait, the UAE announced it would provide a USD300 million package of humanitarian assistance for Syrian refugees living in refugee camps in neighbouring countries such as Jordan, Lebanon and Turkey. Based on the available information, the UAE Government has not pledged any funds in support of the Syrian opposition.

ATTACHMENT A

Bilateral agreements currently in force between Australia and the United Arab Emirates

- *Agreement on Trade and Economic Relations and Technical Co-operation between the Government of Australia and the Government of the United Arab Emirates*, done at Canberra on 6 March 1985
[1985] ATS 34
- *Agreement with the United Arab Emirates relating to Air Services*, done at Dubai on 8 September 2002
[2005] ATS 8
- *Agreement with the United Arab Emirates on Defence Cooperation*, done at Abu Dhabi on 23 April 2007
[2008] ATS 17
- *Treaty on Mutual Legal Assistance in Criminal Matters between Australia and the United Arab Emirates*, done at Hobart on 26 July 2007
[2011] ATS 28
- *Treaty on Extradition between Australia and the United Arab Emirates*, done at Hobart on 26 July 2007 **[2011] ATS 29**

Bilateral agreements not yet in force

Agreement between the Government of Australia and the Government of the United Arab Emirates on Cooperation in the Peaceful Uses of Nuclear Energy, done at Abu Dhabi on 31 July 2012 [2012] ATNIF 14