### No. 19645

# AUSTRALIA and FRANCE

Exchange of letters constituting an agreement for a transitional arrangement to enable conversion and/or enrichment in France of Australian origin nuclear material supplied to Japan (with annex). Paris, 30 October 1980

Authentic texts: English and French.

Registered by Australia on 11 March 1981.

## AUSTRALIE et FRANCE

Échange de lettres constituant un accord au sujet d'un arrangement intérimaire autorisant la conversion et/ou l'enrichissement en France de matières nucléaires d'origine australienne fournies au Japon (avec annexe). Paris, 30 octobre 1980

Textes authentiques : anglais et français. Enregistré par l'Australie le 11 mars 1981. **EXCHANGE OF LETTERS CON-**STITUTING AN AGREE-MENT! BETWEEN THE GOV-ERNMENT OF AUSTRALIA AND THE GOVERNMENT OF **FRENCH** REPUBLIC THE FOR A TRANSITIONAL AR-RANGEMENT TO ENABLE CONVERSION AND/OR EN-RICHMENT IN FRANCE OF AUSTRALIAN ORIGIN NU-SUP-MATERIAL CLEAR PLIED TO JAPAN

ÉCHANGE DE LETTRES CONS-TITUANT UN ACCORD<sup>2</sup> ENTRE LE GOUVERNEMENT AUSTRALIEN ET LE GOU-VERNEMENT DE LA RÉPU-**FRANCAISE** BLIOUE SUJET D'UN ARRANGE-MENT INTÉRIMAIRE AUTO-RISANT LA CONVERSION ET/OU L'ENRICHISSEMENT EN FRANCE DE MATIÈRES NUCLÉAIRES D'ORIGINE AUSTRALIENNE FOURNIES AU JAPON

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30 October 1980

250/3/8

My dear Secretary-General,

I have the honour to refer to discussions between Australian and French officials which took place in Canberra in August 1980 which covered, inter alia, an agreement for a transitional arrangement to enable conversion and/or enrichment in France of Australian origin nuclear material supplied to Japan under a sales contract concluded prior to 2 December 1972.

During these discussions the Australian and French Governments reaffirmed their commitment to ensuring that the international development and use of nuclear energy for peaceful purposes are carried out under arrangements which will further the objective of the non-proliferation of nuclear weapons; their intention to establish arrangements under which Australian origin nuclear material can be made available for peaceful non-explosive purposes within France and the European Atomic Energy Community; and their expectation that the application of IAEA safeguards in France in implementation of the Agreement between France, the European Atomic Energy Community and the International Atomic Energy Agency for the application of safeguards in France signed on 20 and 27 July 1978<sup>3</sup> will commence in 1981.

Pending the entry into force of the Agreement between France and the European Atomic Energy Community and the International Atomic Energy

<sup>&</sup>lt;sup>1</sup> Came into force on 30 October 1980, the date of the letter in reply, in accordance with the provisions of

the said letters.

<sup>2</sup> Entré en vigueur le 30 octobre 1980, date de la lettre de réponse, conformément aux dispositions desdites lettres.
<sup>3</sup> United Nations, *Treaty Series*, vol. 1259, No. 1-20680.

Agency for the application of safeguards in France, signed on 20 and 27 July 1978, and of the agreement between Australia and France concerning nuclear transfers and/or the agreement between Australia and the European Atomic Energy Community concerning nuclear transfers, which together will enable Australian origin nuclear material in France to be covered by IAEA safeguards as well as by the other bilateral requirements of Australia's nuclear safeguards policy, the Australian Government proposes that, as a transitional arrangement, Australian origin nuclear material intended for end use only in commercial electric power generation in Japan may be transferred to France for conversion and/or enrichment only in accordance with the following conditions:

- (1) This letter applies only to 478 short tons of uranium concentrate (yellowcake) which is proposed to be shipped from Australia under the contract between Shikoku Electric Power Company and Queensland Mines Ltd concluded on 9 October 1972 as to 300 short tons in January 1981 and as to 178 short tons in April 1981.
  - (2) For the purposes of this letter the following definitions apply:
- (a) "Australian origin nuclear material" means uranium concentrate (natural uranium ore concentrate of the approximate chemical formulation U308) and all natural, enriched and depleted uranium products, including compounds, derived therefrom, or equivalent quantities;
- (b) "Conversion" means transformation by chemical processes of uranium concentrate to uranium hexafluoride;
- (c) "Enrichment" means increasing the ratio of the isotope uranium 235 to the total uranium isotopes above the ratio found in nature;
- (d) "Appropriate governmental authority" means, in the case of France, the Secrétaire général du Comité interministériel de la sécurité nucléaire or such other authority as the French Government may designate from time to time and, in the case of Australia, the Australian Safeguards Office or such other authority as the Australian Government may designate from time to time.
- (3) The Australian origin nuclear material, when in France, shall not be used for any other purpose than the conversion and/or enrichment below 20 per cent in the isotope U<sup>235</sup> contracted for and the associated storage.
- (4) Australian origin nuclear material transferred to France, with the exception of normal process losses and depleted uranium tails, shall be retransferred from France to Japan or any other destination approved by the Australian Government for each shipment of Australian origin nuclear material supplied to France. Such retransfer shall take place within eighteen months of the date of arrival in France of the Australian origin nuclear material, or such other period of time as may be agreed between Australia and France to allow for actual commercial processing time for such conversion and/or enrichment.
- (5) The depleted uranium tails resulting from enrichment of Australian origin nuclear material shall be subject to IAEA safeguards under the Agreement between France, the Community and the International Atomic Energy Agency for the application of safeguards in France when it is in force, and if not subject to such IAEA safeguards, these tails or an equivalent quantity, the U<sup>235</sup> assay of which shall not be less than the contract tails assay for U<sup>235</sup>, shall be retransferred from France to Japan or any other destination approved by the Australian Government for each shipment of Australian origin nuclear material supplied to France. Such retransfer shall take place within three months of the date of shipment of the corresponding enriched uranium.
- (6) The implementation of measures of physical protection to be applied to the Australian origin nuclear material within French jurisdiction is the responsibility of the French Government. The French Government shall apply, as a minimum, measures of physical protection which shall conform to the levels specified in annex A. The French

Government will be guided by recommendations of international expert groups and especially Agency document INFCIRC 225/Rev.1 in the implementation of its physical protection measures.

- (7) The appropriate governmental authorities shall enter into an implementing arrangement in order to ensure the effective implementation of these conditions.
- (8) Representatives of our two Governments shall, at the request of either Government, consult on matters concerning the implementation of these conditions.

The two Governments expect that the agreements concerning nuclear transfers between Australia and France and Australia and the European Atomic Energy Community will have entered into force during 1981. If either of these two agreements and the Agreement between France, the European Atomic Energy Community and the International Atomic Energy Agency have not entered into force by the end of 1981, the French and Australian Governments will consult on the possibility of amending the transitional arrangement to include further shipments under the contract between Shikoku Electric Power Company and Queensland Mines Ltd concluded on 9 October 1972.

I have the honour to propose that this letter and Your Excellency's confirmatory reply constitute an agreement between the two Governments, such an agreement to enter into force on the date of Your Excellency's confirmatory reply and to continue in force until the date it is superseded by the relevant Agreements mentioned in this letter, or until the obligations in this letter pertaining to Australian origin nuclear material subject to this letter have been discharged, whichever date is the sooner.

Please accept, my dear Secretary-General, the assurances of my highest consideration.

J. R. ROWLAND

M. Bruno de Leusse de Syon Secrétaire général Ministère des affaires étrangères Paris

#### ANNEX A

#### CRITERIA FOR LEVELS OF PHYSICAL PROTECTION

#### Category III:

- —Use and storage within an area to which access is controlled.
- —Transportation under special precautions including prior arrangements among sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient States, respectively, in case of international transport specifying time, place and procedures for transferring transport responsibility.

#### Category II:

- —Use and storage within a protected area to which access is controlled, i.e., an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control, or any area with an equivalent level of physical protection.
- --Transportation under special precautions including prior arrangements among sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient States, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

#### Category I:

Materials in this category shall be protected with highly reliable systems against unauthorized use as follows:

- —Use and storage within a highly protected area, i.e., a protected area as defined for category II above, to which, in addition, access is restricted to persons whose trust-worthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorized access or unauthorized removal of material.
- —Transportation under special precautions as identified above for transportation of category II and III materials and, in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces.

Table: CATEGORIZATION OF NUCLEAR MATERIAL

	Form	Category			
Material		I	II	III	
1. Plutonium <sup>a</sup>	Unirradiated <sup>b</sup>	2 kg or more	Less than 2 kg but more than 500 g	500 g or less <sup>c</sup>	
2. Uranium-235	Unirradiated <sup>b</sup>				
	—Uranium enriched to 20% <sup>235</sup> U or more	5 kg or more	Less than 5 kg but more than 1 kg	l kg or less <sup>e</sup>	
	—Uranium enriched to 10% <sup>235</sup> U but less than 20%	_	10 kg or more	Less than 10 kg <sup>c</sup>	
	—Uranium enriched above natural, but less than 10% <sup>235</sup> U <sup>4</sup>			10 kg or more	
3. Uranium-233	Unirradiated <sup>b</sup>	2 kg or more	Less than 2 kg but more than 500 g	500 g or less <sup>e</sup>	
4. Irradiated fuel			Depleted or nat- ural uranium, tho- rium or low-en- riched fuel (less than 10% fissile content) <sup>e, f</sup>		

a As identified in the Trigger List of INFCIRC/254.

<sup>e</sup> Less than a radiologically significant quantity should be exempted.

Although this level of protection is recommended, it would be open to States, upon evaluation of the specific circumstances, to assign a different category of physical protection.

<sup>&</sup>lt;sup>b</sup> Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one metre unshielded.

d Natural uranium, depleted uranium and thorium and quantities of uranium enriched to less than 10% not falling in category III should be protected in accordance with prudent management practice.

f Other fuel which by virtue of its original fissile material content is classified as category I or II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 100 rads/hour at one metre unshielded.

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Tableau	•	CLASSIFICATION	DEC	MATICOEC	MITTOL EXIDES
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		Catégorie			
Matière	Forme	1	11	111	
1. Plutonium <sup>a</sup>	Non irradié <sup>b</sup>	2 kg ou plus	moins de 2 kg mais plus de 500 g	500 g ou moins <sup>e</sup>	
2. Uranium 235	Non irradié <sup>b</sup>				
	— Uranium enrichi à 20% en <sup>235</sup> U ou plus	5 kg ou plus	moins de 5 kg mais plus d'1 kg	1 kg ou moins <sup>c</sup>	
	— Uranium enrichi à 10% en <sup>235</sup> U mais moins de 20%		10 kg ou plus	moins de 10 kg <sup>e</sup>	
	— Uranium enrichi par rapport à l'uranium naturel mais à moins de 10% en <sup>235</sup> U <sup>4</sup>			10 kg ou plus	
3. Uranium 233	Non irradié <sup>b</sup>	2 kg ou plus	moins de 2 kg mais plus de 500 g	500 g ou moins <sup>c</sup>	
4. Combustible irradié			Uranium naturel ou appauvri, tho- rium ou combus- tible faiblement enrichi (teneur en produit fissile infé- rieure à 10%) <sup>e, f</sup>		

a Tel qu'il est défini dans la liste de base de l'Infcirc 254.

Une quantité inférieure à celle qui est radiologiquement importante sera dispensée de protection.

e Bien que ce niveau de protection soit recommandé, les Etats peuvent, après examen des circonstances particulières, fixer une catégorie de protection physique différente.

Autre combustible qui, du fait de sa teneur originelle en matière fissile, est classé dans la catégorie I ou II avant irradiation peut être déclassé d'une catégorie si le niveau de radiation du combustible dépasse 100 rads/heure à un mètre sans protection.

## [Translation — Traduction]

### · MINISTRY OF FOREIGN AFFAIRS EMBASSY OF FRANCE SECRETARY-GENERAL

Paris, 30 October 1980

Sir,

I have the honour to acknowledge receipt of your letter dated 30 October 1980, the French translation of which has been approved by the two Parties, and which reads as follows:

[See letter I]

b Matière non irradiée dans un réacteur ou matière irradiée dans un réacteur mais avec un niveau de radiation égal ou inférieur à 100 rads/heure à un mètre sans protection.

d L'uranium naturel, l'uranium appauvri, le thorium et les quantités d'uranium enrichi à moins de 10% qui n'entrent pas dans la catégorie III devront être protégés conformément à des pratiques de gestion prudente.

I have the honour to inform you that the Government of the French Republic accepts the proposed terms and agrees that your letter and this reply shall constitute an agreement between our two Governments which shall enter into force on the date of my reply and shall remain in force until the date on which it is superseded by the relevant Agreements mentioned in this letter or the date on which the obligations agreed to in this letter concerning nuclear material of Australian origin have been discharged, whichever is earlier.

Accept, Sir, etc.

[Bruno de Leusse de Syon]

His Excellency John Rowland Ambassador of Australia Paris

[Annex as under letter I]