

**No. 27462**

---

**AUSTRALIA  
and  
EGYPT**

**Agreement concerning cooperation in the peaceful uses of  
nuclear energy and the transfer of nuclear material be-  
tween Australia and the Arab Republic of Egypt (with  
annexes). Signed at Cairo on 18 February 1988**

*Authentic texts: English and Arabic.*

*Registered by Australia on 30 July 1990.*

---

**AUSTRALIE  
et  
ÉGYPTE**

**Accord relatif à la coopération en vue de l'utilisation de  
l'énergie nucléaire à des fins pacifiques et du transfert  
de matériel nucléaire entre l'Australie et la République  
arabe d'Égypte (avec annexes). Signé au Caire le 18 fé-  
vrier 1988**

*Textes authentiques : anglais et arabe.*

*Enregistré par l'Australie le 30 juillet 1990.*

AGREEMENT<sup>1</sup> BETWEEN THE GOVERNMENT OF AUSTRALIA  
AND THE GOVERNMENT OF THE ARAB REPUBLIC OF  
EGYPT CONCERNING COOPERATION IN THE PEACEFUL  
USES OF NUCLEAR ENERGY AND THE TRANSFER OF NU-  
CLEAR MATERIAL BETWEEN AUSTRALIA AND THE ARAB  
REPUBLIC OF EGYPT

The Government of Australia and the Government of the Arab  
Republic of Egypt,

Reaffirming 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;

Mindful that both Australia and the Arab Republic of Egypt are  
non-nuclear weapon States which are Parties to the Treaty on  
the Non-Proliferation of Nuclear Weapons, done at London,  
Moscow and Washington on 1 July 1968<sup>2</sup> (hereinafter referred to  
as "the Non-Proliferation Treaty");

Recognising that Australia and the Arab Republic of Egypt have  
under the Non-Proliferation Treaty undertaken not to  
manufacture or otherwise acquire nuclear weapons or other  
nuclear explosive devices and that both Governments have  
concluded agreements with the International Atomic Energy  
Agency (hereinafter referred to as the "Agency") for the

<sup>1</sup> Came into force on 2 June 1989, the date specified in an exchange of notes on the same date by which the Contracting Parties informed each other of the completion of their respective constitutional and legal requirements, in accordance with article XV (1).

<sup>2</sup> United Nations, *Treaty Series*, vol. 729, p. 161.

application of safeguards in their respective countries in connection with the Non-Proliferation Treaty;

Affirming their support for the objectives and provisions of the Non-Proliferation Treaty and their desire to promote universal adherence to the Non-Proliferation Treaty;

Confirming the desire of both countries to cooperate in the development and application of nuclear energy for peaceful purposes;

Desiring to establish conditions consistent with their commitment to non-proliferation under which nuclear material can be transferred between Australia and the Arab Republic of Egypt for peaceful purposes;

Have agreed as follows:

#### ARTICLE I

The Parties shall cooperate in the peaceful uses of nuclear energy in accordance with the provisions of this Agreement. The cooperation contemplated relates to the peaceful uses of nuclear energy and includes transfer of nuclear material, research and development, exchange of unclassified information, technical training, visits by scientists and projects of mutual interest, as may be agreed between them. This cooperation will be facilitated as may be

necessary by specific agreements. The Parties may designate governmental authorities and natural or legal persons to undertake such cooperation.

## ARTICLE II

1. This Agreement shall apply to:
  - (a) nuclear material transferred between Australia and the Arab Republic of Egypt for peaceful purposes whether directly or through a third country;
  - (b) all forms of nuclear material prepared by chemical or physical processes or isotopic separation from nuclear material subject to the Agreement; if the nuclear material subject to the Agreement is mixed with other nuclear material, the quantity of nuclear material so prepared shall only be regarded as falling within the scope of this Agreement in the same proportion as the quantity of nuclear material used in its preparation, and which is subject to this Agreement, bears to the total quantity of nuclear material so used;
  - (c) all generations of nuclear material produced by neutron irradiation of nuclear material subject

to the Agreement; if nuclear material subject to the Agreement is irradiated together with other nuclear material, the quantity of nuclear material so produced shall only be regarded as falling within the scope of this Agreement in the same proportion as the quantity of nuclear material which is subject to this Agreement and which, used in its production, contributes to this production.

2. Nuclear material referred to in paragraph 1 of this Article shall be transferred pursuant to this Agreement only to a natural or legal person identified by the recipient Party to the supplier Party as duly authorised to receive it provided that such nuclear material shall at all times be used or stored in facilities that have been accepted in writing by the Parties and are listed in Annex A.

### ARTICLE III

1. Nuclear material referred to in Article II shall remain subject to the provisions of this Agreement until

- (a) it is determined that it is no longer usable; or
- (b) it is determined that it is practicably irrecoverable for processing into a form in which

it is usable for any nuclear activity relevant from the point of view of safeguards referred to in Articles V and VI; or

(c) it has been transferred beyond the jurisdiction of Australia or beyond the jurisdiction of the Arab Republic of Egypt in accordance with the provisions of sub-paragraph (a) of paragraph 1 of Article VIII of this Agreement; or

(d) it is otherwise agreed between the Parties.

2. For the purpose of determining when nuclear material subject to this Agreement is no longer usable or is no longer practicably recoverable for processing into a form in which it is usable for any nuclear activity relevant from the point of view of the safeguards referred to in Articles V and VI, both Parties shall accept a determination made by the Agency. For the purpose of this Agreement such determination shall be made by the Agency in accordance with the provisions for the termination of safeguards of the relevant safeguards agreement between the Party concerned and the Agency.

#### ARTICLE IV

Nuclear material subject to this Agreement shall not be used for, or diverted to, the manufacture of nuclear weapons or other nuclear explosive devices, research on or development

of nuclear weapons or other nuclear explosive devices, or be used for any military purpose.

#### ARTICLE V

1. Where Australia is the recipient, compliance with Article IV of this Agreement shall be ensured by a system of safeguards applied by the Agency in accordance with the Safeguards Agreement concluded on 10 July 1974 between Australia and the Agency<sup>1</sup> in connection with the Non-Proliferation Treaty.

2. Where the Arab Republic of Egypt is the recipient, compliance with Article IV of this Agreement shall be ensured by a system of safeguards applied by the Agency in accordance with the Safeguards Agreement concluded on 7 October 1981 between the Arab Republic of Egypt and the Agency<sup>2</sup> in connection with the Non-Proliferation Treaty.

#### ARTICLE VI

If, notwithstanding the provisions of Article V of this Agreement, nuclear material subject to this Agreement is present in the territory of a Party and the Agency is not administering safeguards in the territory of that Party under

---

<sup>1</sup> United Nations, *Treaty Series*, vol. 964, p. 83.

<sup>2</sup> *Ibid.*, vol. 1328, p. 309.

the applicable Agreement concluded in accordance with Article III of the Non-Proliferation Treaty and referred to in Article V of this Agreement, that Party shall accept safeguards under a new agreement or agreements to which it and the Agency are parties and which provide safeguards equivalent in scope and effect to those provided by the applicable Agreements referred to in Article V of this Agreement, or, if the Agency is not administering safeguards in the territory of that Party under such new agreement or agreements referred to above, the Parties shall forthwith enter into a further agreement for the application of a safeguards system in the territory concerned which conforms with the principles and procedures of the Agency's safeguards system and which provides for the application of safeguards to nuclear material subject to this Agreement. In the latter case, the Parties shall also agree on the safeguarding party responsible for administering such a safeguards system. The Parties shall consult and assist each other in the application of such a system.

#### ARTICLE VII

1. Each Party shall take measures to ensure adequate physical protection of nuclear material within its jurisdiction. The Parties shall apply, as a minimum, measures of physical protection which shall conform to the levels specified in Annex B.



2. The Parties shall consult at the request of either Party concerning matters relating to physical protection of nuclear material subject to this Agreement.

#### ARTICLE VIII

1. Nuclear material subject to this Agreement shall be:

(a) transferred beyond the territorial jurisdiction of the recipient Party;

(b) enriched to 20% or greater in the isotope U235; or

(c) reprocessed;

only with the prior written consent of the supplier Party.

2. In applying paragraph 1 of this Article, the supplier Party shall take into account non-proliferation considerations, international nuclear fuel cycle developments and energy requirements of the recipient Party.

3. If the supplier Party considers that it is unable to grant consent to any matter referred to in paragraph 1 of this Article, that Party shall provide the other Party with an immediate opportunity for full consultation on that issue.

4. In any event, the supplier Party shall not withhold consent for the purpose of securing commercial advantage.

#### ARTICLE IX

1. The Parties shall establish an administrative arrangement to ensure the effective fulfilment of the obligations of this Agreement.

2. If nuclear material subject to this Agreement is present in the territory of a Party, that Party shall, upon the request of the other Party, provide the other Party in writing with the overall conclusions which the Agency has drawn from its verification activities, insofar as they relate to nuclear material subject to this Agreement.

3. The Parties shall take all appropriate precautions to preserve the confidentiality of commercial and industrial secrets and other confidential information received as a result of the operation of this Agreement.

#### ARTICLE X

1. The Parties shall consult within thirty days at the request of either Party in order to ensure the effective implementation of this Agreement or to review matters relating to non-proliferation.

2. The Agency may be invited to participate in such consultations upon the request of the Parties.

#### ARTICLE XI

In the event of non-compliance by the recipient Party with any of the provisions of Articles II.2, IV to X inclusive or of Article XII of this Agreement, or non-compliance with, or repudiation of, Agency safeguards arrangements by the recipient Party, the supplier Party shall have the right to suspend or cancel further transfers of nuclear material and to require the recipient Party to take corrective steps. If following consultation between the Parties, such corrective steps are not taken within a reasonable time, the supplier Party shall thereupon have the right to require the return of nuclear material subject to this Agreement, against payment therefor at prices then current. In the event of detonation by a Party of a nuclear explosive device, the above provisions shall also apply.

#### ARTICLE XII

Any dispute arising out of the interpretation or application of this Agreement which is not settled by negotiation shall, at the request of either Party, be submitted to an arbitral tribunal which shall be composed of three arbitrators appointed in accordance with the provisions of this

Article. Each Party shall designate one arbitrator who may be its national and the two arbitrators so designated shall appoint a third, a national of a third State, who shall be the Chairman. If, within 30 days of the request for arbitration, either Party has not designated an arbitrator, either Party to the dispute may request the President of the International Court of Justice to appoint an arbitrator. The same procedure shall apply if, within 30 days of the designation or appointment of the second arbitrator, the third arbitrator has not been appointed. All decisions shall be made by majority vote of all the members of the arbitral tribunal. The arbitral procedure shall be fixed by the tribunal. All decisions and rulings of the tribunal shall be binding on the Parties and shall be implemented by them.

#### ARTICLE XIII

The Annexes of this Agreement form an integral part of this Agreement.

#### ARTICLE XIV

For the purpose of this Agreement:

- (a) "military purpose" means direct military applications of nuclear energy such as nuclear weapons, military nuclear propulsion, military

nuclear rocket engines or nuclear reactors for military use but does not include indirect uses such as power for a military base drawn from a civil power network, or production of radioisotopes to be used for diagnosis in a military hospital;

- (b) "nuclear material" means any "source material" or "special fissionable material" as those terms are defined in Article XX of the Statute of the Agency.<sup>1</sup> Any determination by the Board of Governors of the Agency under Article XX of the Agency's Statute which amends the list of materials considered to be "source material" or "special fissionable material" shall only have effect under this Agreement when both Parties to this Agreement have informed each other in writing that they accept such amendment;
- (c) "peaceful purposes" means all uses other than use for a military purpose.

#### ARTICLE XV

1. For the purpose of the entry into force of this Agreement, the Parties shall inform each other by an exchange

---

<sup>1</sup> United Nations, *Treaty Series*, vol. 276, p. 3. For the texts amending the Statute see vol. 471, p. 334 and vol. 1082, p. 290.

of notes that their respective constitutional and legal requirements have been completed. This Agreement shall enter into force on the date the Parties, in that exchange of notes, specify for its entry into force.

2. This Agreement may be amended or revised by agreement between the Parties. Any amendment or revision shall be in writing and shall enter into force on the date the Parties, by an exchange of notes, specify for its entry into force.

3. This Agreement shall remain in force initially for a period of 30 (thirty) years. If neither Party has notified the other Party of its intention to terminate the Agreement, at least 180 days prior to the expiry of such period, this Agreement shall continue in force until 180 days after notice of termination has been given by either Party to the other Party; provided, however, that unless otherwise agreed between the Parties, termination of this Agreement shall not release the Parties from obligation under this Agreement in respect of nuclear material referred to in Article II of this Agreement which remains usable or practicably recoverable for processing into a form in which it is usable for any nuclear activity relevant from the point of view of safeguards in accordance with Article III of this Agreement.

IN WITNESS WHEREOF the undersigned, being duly authorised thereto by their respective Governments, have signed this Agreement.

DONE, in duplicate in the English and Arabic languages, both texts having equal validity, at Cairo this eighteenth day of February, one thousand nine hundred and eighty-eight.

For the Government  
of Australia:

[*Signed — Signé*]<sup>1</sup>

For the Government  
of the Arab Republic of Egypt:

[*Signed — Signé*]<sup>2</sup>

---

<sup>1</sup> Signed by Bill Hayden — Signé par Bill Hayden.

<sup>2</sup> Signed by Mohamed Maher Abaza — Signé par Mohamed Maher Abaza.

ANNEX A

1. Pursuant to paragraph 2 of Article II of this Agreement and subject to paragraph 6 of this Annex, nuclear material subject to this Agreement (hereinafter referred to as NMSA) can be processed, used and stored in the nuclear fuel cycle facilities listed by fuel cycle stages in paragraphs 2 and 3 below:

2. A. Conversion to UF<sub>6</sub>

- |        |  |
|--------|--|
| Canada | 1. Eldorado Resources Ltd., Port Hope, Ontario; Blind River, Ontario |
| France | 2. Comurhex S.A., Malvesi, Narbonne                                  |
|        | 3. Comurhex S.A., Pierrelatte, Narbonne                              |
| UK     | 4. British Nuclear Fuels Ltd., Preston, Lancashire                   |
| USA    | 5. Allied Chemical Corp., Metropolis, Illinois                       |
|        | 6. Sequoyah Fuels Corp., Gore, Oklahoma                              |



**B. Enrichment**

- |             |    |                          |
|-------------|----|--------------------------|
| France      | 1. | Eurodif S.A., Tricastin  |
| UK          | 2. | URENCO, Capenhurst       |
| Netherlands | 3. | URENCO, Almelo           |
| FRG         | 4. | Gronau                   |
| USA         | 5. | Department of Energy,    |
|             |    | (a) Oak Ridge, Tennessee |
|             |    | (b) Portsmouth, Ohio and |
|             |    | (c) Paducah, Kentucky    |

**C. Fuel Fabrication (including UF<sub>6</sub> to UO<sub>2</sub> conversion)**

- |     |    |                                  |
|-----|----|----------------------------------|
| USA | 1. | Westinghouse, Pittsburgh         |
|     | 2. | Babcock and Wilcox, New York     |
|     | 3. | Combustion Engineering, New York |

4. General Electric, Wilmington
5. Advanced Nuclear Fuels Corp.  
Richland
- UK 6. British Nuclear Fuels Ltd.,  
Preston, Lancs.
- FRG 7. Kraftwerk Union AG, Erlangen
8. Reaktorbrennelement Union  
GmbH,  
  
(a) Hanau  
(b) Karlstein
9. Advanced Nuclear Fuels GmbH,  
Lingen
- France 10. Framatome, Division  
Combustible, Paris
- Sweden 11. Asea Atom, Vasteras

3. The Arab Republic of Egypt has developed a long term plan for installing nuclear power units according to a plan summarised at March 1982 as follows:

- in 1990, 900 MWe
- in 1995, 3,600 MWe
- in 2000, 8,400 MWe

Preparation of a site at El Dabaa 150 km west of Alexandria is under way. Four units can be accommodated and arrangements for installing Units 1 and 2 there are now proceeding. If arrangements proceed according to plan, the Arab Republic of Egypt expects to begin construction of those Units 1 and 2 (listed below) in 1988-1990. In furtherance of these plans the Arab Republic of Egypt has concluded arrangements with the U.S.A., France, Federal Republic of Germany, U.K., Canada, Sweden, Switzerland, Belgium, Italy and Niger.

#### Nuclear Reactors for Electricity Generation

El Dabaa 1 (Planned - thermal reactor)

El Dabaa 2 (Planned - thermal reactor)

4. Consultations regarding the operation of this Annex including the addition of fuel cycle stages and of fuel cycle facilities shall be held in accordance with Article X of this Agreement.

5. Additions or deletions of fuel cycle facilities in the fuel cycle stages set out above may be made at any time with the written consent of the Parties.

6. Transfers of nuclear material of Australian origin can take place between facilities listed in paragraphs 2 and 3 of this Annex and located in countries where the nuclear material is subject to an Agreement regarding nuclear transfers to which the Government of Australia is a party, provided that Australia has not advised the Arab Republic of Egypt that it has found it necessary to suspend, cancel or refrain from making nuclear transfers to any such country.

7. Where the Arab Republic of Egypt is a Party to a transfer referred to in paragraph 6, it shall promptly notify Australia, in accordance with the procedures set out in the Administrative Arrangement, of such transfers.

ANNEX B

## LEVELS OF PHYSICAL PROTECTION

The document INFCIRC/225 (Rev.1) of the International Atomic Energy Agency entitled "The Physical Protection of Nuclear Material" and similar documents which from time to time are prepared by international groups of experts and updated as appropriate to account for changes in the state of the art and state of knowledge with regard to physical protection of nuclear material are a useful basis for guiding States in designing a system of physical protection measures and procedures.

The levels of physical protection to be ensured by the competent national authorities in the use, storage and transportation of the materials listed in the attached table shall as a minimum include protection characteristics as follows:

## 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 unauthorised 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 trustworthiness 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, unauthorised access or unauthorised 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.

## CATEGORIZATION OF NUCLEAR MATERIAL

Material	Form	Category		
		I	II	III
1. Plutonium(a)	Unirradiated(b)	2 kg or more	Less than 2 kg but more than 500 g	500 g or less(c)
2. Uranium-235	Unirradiated(b)			
	- uranium enriched to 20% $^{235}\text{U}$ or more	5 kg or more	Less than 5 kg but more than 1 kg	1 kg or less(c)
	- uranium enriched to 10% $^{235}\text{U}$ but less than 20%		10 kg or more	Less than 10 kg(c)
	- uranium enriched above natural, but less than 10% $^{235}\text{U}$ (d)			10 kg or more
3. Uranium-233	Unirradiated(b)	2 kg or more	Less than 2 kg but more than 500 g	500 g or less(c)
4. Irradiated fuel			Depleted or natural uranium, thorium or low-enriched fuel (less than 10% fissile content)(e), (f)	



Material	Form	Category		
		I	II	III

cont.

- |   |   |
|---|---|
| <p>(a) As identified in the Trigger List.</p> <p>(b) 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.</p> <p>(c) Less than a radiologically significant quantity should be exempted.</p> <p>(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.</p> | <p>(e) 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.</p> <p>(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.</p> |
|---|---|