

No. 4621

**JAPAN
and
UNITED STATES OF AMERICA**

**Second Agreement of lease of special nuclear material (with
exchange of notes). Signed at Washington, on 8 May
1957**

Official texts: English and Japanese.

Registered by Japan on 31 December 1958.

**JAPON
et
ÉTATS-UNIS D'AMÉRIQUE**

**Deuxième Accord relatif à la location de matières nucléaires
spéciales (avec échange de notes). Signé à Washington,
le 8 mai 1957**

Textes officiels anglais et japonais.

Enregistré par le Japon le 31 décembre 1958.

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No. 4621. SECOND AGREEMENT¹ OF LEASE OF SPECIAL NUCLEAR MATERIAL BETWEEN THE GOVERNMENT OF JAPAN AND THE UNITED STATES ATOMIC ENERGY COMMISSION ACTING ON BEHALF OF THE GOVERNMENT OF THE UNITED STATES OF AMERICA. SIGNED AT WASHINGTON, ON 8 MAY 1957

The Government of Japan (hereinafter referred to as the "Lessee"), and the United States Atomic Energy Commission (hereinafter referred to as the "Lessor"), acting on behalf of the Government of the United States of America, with respect to the lease of special nuclear material pursuant to the Agreement for Cooperation between the Government of Japan and the Government of the United States of America Concerning Civil Uses of Atomic Energy, signed November 14, 1955,² and as it may be amended or superseded, and subject to all of the terms, conditions, provisions, and guaranties contained therein, agree as follows :

Article I

A. The Lessor agrees to lease to the Lessee and the Lessee agrees to lease from the Lessor, a quantity of enriched uranium not to exceed four (4) kilograms of contained U-235 in uranium enriched to nineteen and one-half per cent (19.5%) to twenty per cent (20%) to be contained in fuel elements to be prepared in the United States of America by a contractor engaged by the Lessee (hereinafter called the "Contractor"), for use in the operation of a heavy water research reactor manufactured by AMF Atomics, Inc., to be located at the Japan Atomic Energy Research Institute, Tokai-mura, Naka-gun, Ibaragi-ken, Japan, plus, upon request from the Lessee, such additional quantity as, in the opinion of the Lessor, is necessary to permit the effective and continuous operation of the reactor while replaced fuel elements are radioactively cooling in Japan or while fuel elements are in transit, or in the case where any significant amounts of fuel elements are accidentally lost or destroyed, it being the intent of the Lessor to make possible the maximum usefulness of the four (4) kilograms of said material. It is understood that the above enrichment specifications shall not necessarily apply to the enrichment of the uranium leased to the Lessee for use in fission chambers for the reactor, and that

¹ Came into force on 20 May 1957, in accordance with the provisions of article VIII.

² United Nations, *Treaty Series*, Vol. 240, p. 361.

16 220, R. 1957.

the Parties may agree, from time to time, as to the enrichment in the isotope U-235 of such uranium.

B. The Parties may, subject to the terms of this Agreement, from time to time, by means of exchange of letters, agree as to the date of transfer, quantities to be transferred and schedule of return of such material to the Lessor.

C. The Parties agree with regard to such fuel elements that the Lessor shall own all materials produced therein as a result of the use of such fuel elements, which materials shall be subject to the provisions of this Agreement.

Article II

A. The Lessor shall make available to the Contractor uranium hexafluoride in accordance with a schedule which may be agreed upon by the Lessor and the Contractor after consultation with the Lessee. Such transfers to the Contractor shall be made at a facility of the Lessor and shall be subject to such terms, charges and conditions, including licenses necessary to receive such material and to perform such work in the United States of America, as are required of the Contractor by the Lessor.

B. Except as provided in C below, the enrichment in the isotope U-235 of the uranium contained in each fuel element prepared by the Contractor shall, for the purposes of this Agreement, be the enrichment of the uranium which the Contractor received from the Lessor for the fabrication of the fuel element. The quantity of enriched uranium contained in each fuel element shall be as determined by the Contractor and concurred in by the Lessor after any review or analysis which the Lessor deems appropriate. The Lessee shall require the Contractor to identify each fuel element and to provide the Lessor with a certification of the Contractor's determination of the quantity of enriched uranium in each such fuel element and, unless the procedure set forth in C below is followed, the isotopic content thereof.

C. If the Lessee, after making appropriate arrangements with the Contractor, so requests, the enrichment in the isotope U-235 contained in each fuel element may be determined by one of the following organizations, unless otherwise agreed by the Lessor and the Lessee :

- (1) Union Carbide Nuclear Company, which operates Oak Ridge National Laboratory at Oak Ridge, Tennessee, and the Atomic Energy Installation at Paducah, Kentucky.
- (2) Goodyear Atomic Corporation, which operates the Atomic Energy Installation at Portsmouth, Ohio.
- (3) General Electric Company, which operates the Atomic Energy Installation at Hanford, Washington.

(4) University of Chicago, which operates the Argonne National Laboratory at Lemont, Illinois.

The Parties shall agree upon a point in the process of preparation of the fuel elements by the Contractor at which samples will be taken for analysis in the United States of America by one of the above analysts. The cost of such analysis shall be borne by the Lessee.

D. Upon completion of the preparation of the fuel elements for the reactor by the Contractor and the establishment of the quantity and enrichment in the isotope U-235 of uranium contained in such fuel elements, the Lessee shall arrange for a contractor, subject to all license requirements of the Lessor, to deliver such fuel elements to a port of embarkation in the United States of America to be designated by the Lessor after consultation with the Lessee. The Lessee shall give the Lessor at least thirty (30) days notice prior to the date the Lessee wishes to export such fuel elements unless the Parties agree upon another notice period. The Lessor shall perform those actions necessary to effect transfer and export of such fuel elements to the Lessee at such designated port. Costs of shipping, including cost of containers and necessary packaging for domestic and overseas shipment of such fuel elements from the Contractor to the Lessee and any costs of storing such fuel elements, as well as all arrangements for physical handling in connection with delivery to the Lessee, shall be the responsibility of the Lessee and not the Lessor.

E. Acceptance by the Lessee at the point of export of the enriched uranium contained in the fuel elements shall be evidenced by appropriate receipt ; thereafter the Lessee shall assume full responsibility for safekeeping of such enriched uranium in accordance with the provisions of the aforesaid Agreement for Cooperation, for safeguarding against hazards to health and safety and for all loss or destruction of such enriched uranium, however caused.

Article III

After appropriate radioactive cooling, and under appropriate safeguards against hazards to health and safety, acceptable to the Lessor, the Lessee, at its expense, shall deliver at a port of entry in the United States of America to be designated by the Lessor, after consultation with the Lessee, irradiated fuel elements in accordance with a schedule which may be agreed upon by the Lessor and the Lessee in accordance with Article I B. The Lessor shall thereupon perform those actions necessary for the import of such fuel elements. Thereafter, the Lessee shall, unless otherwise agreed upon by the Parties, arrange at its expense for a contractor to transport such fuel elements to the reprocessing facilities or other facilities designated by the Lessor. If the Lessor determines as provided in Article IV A (2) (b) that the cost of reprocessing the fuel elements exceeds the value of recoverable special nuclear material therein, and the Lessor and the Lessee agree

not to reprocess such fuel elements, the Lessor shall receive the fuel elements for storage or other appropriate disposition. The Lessor shall receive such fuel elements for reprocessing except as provided in Article IV A (2) (b), or make appropriate financial settlement with the Lessee ; but if the Lessor determines not to accept such fuel elements for reprocessing at its own facilities, other facilities acceptable to the Lessor being available, the Lessee, at its own expense, shall arrange for reprocessing of such fuel elements at such other facilities, into plutonium metal and uranium hexafluoride meeting Lessor's specifications or such other form as may be agreed upon. Any contractor of the Lessee forwarding or accepting for reprocessing such fuel elements shall be subject to such terms, charges and conditions, including licenses necessary to receive such material and to perform such work in the United States of America as required of such contractor by the Lessor.

Article IV

A. For the lease of enriched uranium contained in fuel elements prepared by the Contractor, the Lessee shall pay to the Lessor, in United States currency, a sum equal to the charges set forth herein at the time or times indicated :

- (1) A use charge for the enriched uranium leased hereunder and contained in each fuel element prepared by the Contractor at the rate of four per cent (4%) per annum of the value of the enriched uranium computed on the basis of the enrichment at the time of transfer, beginning with the date each fuel element is transferred to the Lessee and, except as provided in A (4) of this Article, in the case of material accepted by the Lessor for reprocessing, ending upon the date each such fuel element has been reprocessed by the Lessor into plutonium metal and uranium hexafluoride, meeting Lessor's specifications or such other form as may be agreed upon, or upon the expiration of that period which the Lessor determines to be normal period for such reprocessing, whichever is earlier, or, in the case of returned fuel elements to be reprocessed at facilities other than the Lessor's, upon the date each such fuel element is delivered to such facility for reprocessing.
- (2) A consumption and depletion charge equivalent to the difference between
 - (a) the value of the enriched uranium initially contained in each fuel element leased hereunder as determined from its quantity and enrichment in the isotope U-235, and

(b) the value of the special nuclear material as determined from its quantity and enrichment, recoverable from such fuel elements delivered to the Lessor's reprocessing facility, or an acceptable reprocessing facility, as the case may be. The quantity and enrichment of the special nuclear material recoverable from returned fuel elements delivered to the Lessor shall be determined by the Lessor in the case of fuel elements delivered to the Lessor, or by the acceptable reprocessing facility, with concurrence of the Lessor in the case of fuel elements delivered thereto ; provided that, if the Lessee so requests, the quantity of the special nuclear material in the latter case recoverable from each irradiated fuel elements shall be determined through analysis by the Lessor or by such other means as may be agreed by the Lessor and the Lessee. The cost of such analysis shall be borne by the Lessee.

If the Lessor determines, on the basis of the operating records, that the cost of reprocessing exceeds the value of the special nuclear material recoverable from such fuel elements, and the Lessor and the Lessee agree not to reprocess such fuel elements, then no credit shall be allowed for such material in such fuel elements.

- (3) Whenever the Parties determine that the Lessee is unable to return to the Lessor's reprocessing facility, or an acceptable facility, as the case may be, any fuel elements containing enriched uranium leased hereunder because of loss, theft, or total destruction thereof, the Lessee shall pay within thirty (30) days thereafter the value set forth in A (2) (a) of this Article.
- (4) When a determination as provided in A (3) of this Article is made, the use charge with regard to the fuel elements involved in such a determination shall end. If the Lessor makes a determination as provided in the last sentence of A (2) (b) of this Article, the use charge shall end when the fuel elements involved in such a determination are delivered to the facility designated by the Lessor as provided in Article III.
- (5) With regard to fuel elements returned to the Lessor for reprocessing and reprocessed by the Lessor, a reprocessing charge equal to the Lessor's charges for reprocessing such fuel elements.

B. For the purposes of this Article, the value of the enriched uranium contained in each fuel element transferred to the Lessee shall be determined in accordance with the schedule of values of uranium of various enrichments in the isotope U-235 established by the Lessor and in effect at the time each such fuel element is

transferred to the Lessee. The value of the enriched uranium recoverable from each fuel element returned to the Lessor's reprocessing plant or an acceptable reprocessing facility, as the case may be, shall be determined in accordance with the schedule of values which was applied to the enriched uranium contained in each such fuel element when it was transferred to the Lessee. Where the enrichment of the uranium contained in the fuel element transferred or recoverable from the fuel element returned falls between two successive enrichments on such schedule, the value for the specific enrichment shall be determined by linear interpolation between them. The value of the plutonium recoverable from fuel elements returned to the Lessor shall be the value as fuel established by the Lessor for such material and in effect at the time each such fuel element containing plutonium is delivered to the Lessor's reprocessing facility or an acceptable facility, as the case may be.

C. The charges hereunder shall be payable as follows :

- (1) The use charge shall be paid on an annual basis.
- (2) The consumption and depletion charges shall be paid within thirty (30) days after the Lessee's receipt of a bill to be issued upon determination of the quantity of plutonium and the quantity and enrichment of uranium recoverable from returned fuel elements.
- (3) The charge due under A (3) hereof shall be payable as provided therein.
- (4) The reprocessing charges shall be paid within thirty (30) days after the Lessee's receipt of a bill for such charges from the Lessor.

Article V

The Lessee shall indemnify and save harmless the Government of the United States of America and the Lessor against any and all liabilities (including third party liability) for any cause whatsoever arising out of the production, preparation, ownership, lease, or the possession and use of the enriched uranium contained in fuel elements leased hereunder, or other materials produced therein, after transfer of such enriched uranium by the Lessor to the Lessee. After fuel elements are returned to the United States of America and imported as provided in Article III, the provisions of the preceding sentence shall not be applicable to liabilities of the United States of America or the Lessor for any injury, loss, or damage which may occur from the above causes in the United States of America with regard to such fuel elements.

Article VI

It is understood that, in accordance with the laws of the Government of the United States of America, no Member of or Delegate to the Congress of the United States of America, or Resident Commissioner of the United States of America shall be admitted to or share any part of this Agreement or any benefit that may arise therefrom.

Article VII

For the purposes of this Agreement, the term "fuel element" includes rods, plates and fission chambers.

Article VIII

On the date of receipt by the Lessor of a letter from the Lessee stating that Japan has approved this Agreement in accordance with its legal procedures, this Agreement shall enter into force and shall remain in force until the Agreement for Cooperation between the Government of Japan and the Government of the United States of America Concerning Civil Uses of Atomic Energy, signed November 14, 1955, and as it may be amended or superseded, expires or is terminated.

IN WITNESS WHEREOF the Parties hereto have caused this Agreement to be executed pursuant to duly constituted authority.

DONE at Washington, in duplicate, in the Japanese and English languages, this eighth day of May, 1957.

For the Government of Japan :
Takeso SHIMODA

For the United States Atomic Energy Commission acting on behalf
of the Government of the United States of America :
John A. HALL

EXCHANGE OF NOTES

I

May 8, 1957

My dear Mr. Hall :

I have the honor to refer to the Second Agreement of Lease of Special Nuclear Material between the Government of Japan and the United States Atomic Energy Commission Acting on Behalf of the Government of the United States of America,

which was signed today,¹ and to state the following understandings which have been reached during our negotiations leading to the conclusion of the Agreement :

1. Article I B of the Agreement contemplates that the Government of Japan (hereinafter referred to as the Lessee) and the United States Atomic Energy Commission (hereinafter referred to as the Lessor) may agree as to the date of transfer and return of material to be leased to the Lessee. It is understood that in establishing such schedules of delivery and return, the Lessee may return such material at any time prior to September 30, 1960, notwithstanding any such agreed schedule. In any event, the Lessee shall return such material on September 30, 1960, or upon the termination of the Agreement, whichever first occurs.

2. At the time of transfer of uranium hexafluoride from the Lessor to the Contractor engaged by the Lessee in accordance with Article II A of the Agreement, the Lessor shall state to the Contractor the enrichment and purity of the uranium hexafluoride transferred and shall furnish a copy of such statement to the Lessee. If the quantity, enrichment and purity of the uranium hexafluoride transferred to such Contractor does not conform to the specifications contained in the contract between such Contractor and the Lessor, the responsibility and liability of the Government of the United States of America shall be solely limited to the Lessor, upon return of such uranium hexafluoride, making reasonable efforts to transfer material, at a Lessor's facility, which does conform to such specifications and reimbursing the Contractor for the reasonable costs of packaging and transportation incurred by the Contractor in returning to the Lessor any such material which does not conform to such specifications.

3. With reference to the provisions of Article III and Article IV A (2) (b) of the Agreement, it is the understanding of the Lessee that the Lessor, in determining whether the cost of reprocessing of returned fuel elements exceeds the value of recoverable material therein, shall furnish the Lessee with the total estimated cost of reprocessing and breakdown thereof by major items.

4. With respect to Article VI of the Agreement, it is understood that this Article is not intended to mean that the Lessee shall, without its consent, be subject to the jurisdiction of the courts of the Government of the United States of America.

It would be greatly appreciated, if you would be good enough to confirm the above understandings.

Sincerely yours,

Takeso SHIMODA
Chargé d'Affaires ad interim of Japan

Mr. John A. Hall
United States Atomic Energy Commission
Washington 25, D. C.

¹ See p. 270 of this volume.

II

May 8, 1957

My dear Mr. Shimoda :

I refer to your letter dated today, in connection with the Second Agreement of Lease of Special Nuclear Material between the United States Atomic Energy Commission Acting on Behalf of the Government of the United States of America and the Government of Japan, which was signed today, in which you set forth your understandings on certain matters, as follows :

[See note I]

I would like to take this opportunity to confirm our understanding of the matters set forth above.

Sincerely yours,

John A. HALL

Mr. Takeso Shimoda
Chargé d'Affaires ad interim of Japan
Washington, D. C.