POLICY ISSUE
(Notation Vote)

May 10, 1994 SECY-94-124

FOR: The Commissioners

FROM: Carlton R. Stoiber, Director
Office of International Programs

SUBJECT: DOE PROPOSED SUBSEQUENT ARRANGEMENT TO REPROCESS IRRADIATED RESEARCH REACTOR FUEL IN THE UK

PURPOSE:

To obtain the Commission's approval of a proposed response to the Department of Energy (DOE).

DISCUSSION:

DOE has requested the views of the NRC on a proposed subsequent arrangement to reprocess at Dounreay, United Kingdom (UK) 40 irradiated fuel elements containing approximately 16.050 kilograms of uranium enriched to an average of 30.97 percent in the isotope uranium-235, and 16.5 grams of plutonium that are presently located at Dounreay (Attachment 1). After reprocessing, the recovered uranium will be stored at Dounreay until it can be transferred to the U.S. for disposal. The irradiated fuel elements had been transferred from Spain to the UK in 1990 for storage under a previously approved subsequent arrangement. The Embassy of Spain has indicated that if the fuel elements are not reprocessed at Dounreay, the proposed transfer to the U.S. would have to take place as soon as possible, and, in any case, before September 1996 when the Spain-UK storage agreement ends as there are no operating research reactors in Spain, and no facility to store the material in Spain. Any future use of the recovered uranium and plutonium will be subject to prior U.S. Government consent.

NOTE: TO BE MADE PUBLICLY AVAILABLE WHEN THE FINAL SRM IS MADE AVAILABLE

Contact: Karen Henderson, OIP/NEMR
504-2337

Statutory Requirements

Subsequent arrangements are subject to the statutory criteria in Sections 127, 128, and 131 of the Atomic Energy Act of 1954, as amended. The Act provides that a subsequent arrangement may be approved only if the recipient agrees that the material would be subject to the same criteria which govern direct exports of special nuclear material from the U.S. Because the original export of uranium from the U.S. to Spain was made subject to the U.S.-Spain bilateral agreement, any subsequent arrangement request continues to be subject to that agreement. Spain has agreed that the present request will be subject to the Agreement for Cooperation between the Government of the U.S. and the Government of Spain. The agreement contains a reprocessing and alteration prior consent right. The recovered nuclear material while in EURATOM also will remain subject to the U.S.-EURATOM Additional Agreement for Cooperation, and not used for any nuclear explosive device or for research on or development of any nuclear explosive device.

DOE's analysis does not address the use or transfer restriction on the 16.5 grams of plutonium contained in the subject material; however, it is assumed that the plutonium will be treated as waste and not recovered. If not, the plutonium will remain subject to the terms and conditions of the U.S.-Spain Agreement for Cooperation. Staff also notes that although DOE's correspondence is lacking in the Section 131 "Timely Warning" analysis, concern is allayed since the material will be reprocessed and stored in a nuclear weapons state and will not be retransferred without prior U.S. approval.

DOE has determined that the terms of the proposed subsequent arrangement satisfy the requirements set forth in Sections 127, 128, and 131. DOE also has concluded that the subject request is consistent with the President's policy of September 27, 1993 regarding plutonium reprocessing. In the present case, the recovered uranium is not intended for use in any nuclear power program but will be transferred at some future date to the U.S. for disposal. State has concurred in the approval of the present case.

International Safeguards and Physical Security

The UK is a nuclear weapons state and, therefore, not subject to International Atomic Energy Agency (IAEA) safeguards requirements for the proposed subsequent arrangement. While the UK has submitted some of its nuclear facilities to be considered for IAEA safeguards inspections under its "Voluntary Offer" agreement, the Dounreay reprocessing plant is currently not subject to routine IAEA safeguards.

As regards physical security, a physical protection evaluation was performed during a visit to the UK in May 1991, and the conclusion was that its program was consistent with the recommendations of the then-current version of IAEA INFCIRC/225/Rev. 2. Staff has reviewed information received to date, none of which indicates any degradation of physical protection in the UK. Further,

staff has determined, on the basis of currently available information, that the UK's physical protection plan is in conformance with IAEA INFCIRC/225/Rev. 3.

CONCLUSION:

The staff believes all applicable statutory requirements of the Atomic Energy Act of 1954, as amended, are met for the subject case. Staff also believes that approval of the request would not be inimical to the common defense and security of the U.S. and is consistent with U.S. policy. Accordingly, the staff believes the Commission should not object to the approval of the subject subsequent arrangement.

COORDINATION:

The Executive Director for Operations concurs in the paper. The Office of the General Counsel has no legal objection.

RECOMMENDATION:

That the Commission approve the proposed response to DOE at Attachment 2.

Carlton R. Stoiber, Director
Office of International Programs

Attachments:
1. 3/1/94 DOE Memo ETFei to RDHauber, et al., w/enclosure
2. Proposed Response to DOE

Commissioners' comments or consent should be provided directly to the Office of the Secretary by COB Tuesday, May 24, 1994.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Tuesday, May 17, 1994, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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Department of Energy
Washington, DC 20585

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MAR 1 1994

'94 MAR -3 P3:42

MEMORANDUM

TO: Mr. William Clements, Director
Office of Technology and Policy Analysis
Department of Commerce
OTPA Room 4069A
Washington, D.C. 20230

Defense Nuclear Agency
Arms Control & Test Limitation Division
6801 Telegraph Rd.
Alexandria, Va. 22310-3398
Attn: OPAC (Major Drew Fisher)

Mr. Robin DeLaBarre
OES/NEC
Department of State
Washington, D.C. 20520

Mr. Michael D. Rosenthal
U.S. Arms Control & Disarmament Agency
NWC/INA, Room 4678
Washington, D.C. 20451

Mr. Ronald D. Hauber
Office of International Programs
Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Request for Subsequent Arrangements Under the NNPA of 1978

Enclosed for your review is a draft Federal Register notice concerning a proposed subsequent arrangement, as well as an analysis of the incoming request. We would appreciate you comments within 20 days.

for Edward T. Fei
Acting Director
Office of Nonproliferation Policy
Office of Arms Control
and Nonproliferation

ATTACHMENT 1

DEPARTMENT OF ENERGY

Office of Arms Control and Nonproliferation

PROPOSED SUBSEQUENT ARRANGEMENT

Pursuant to Section 131 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2160), notice is hereby given of a proposed "subsequent arrangement", under the Agreement for Cooperation between the Government of the United States of America and the Government of Spain concerning Civil Uses of Atomic Energy.

The subsequent arrangement to be carried out under the above-mentioned agreements involves approval for the reprocessing of irradiated research reactor fuel which was previously transferred from Spain to the United Kingdom (the United Kingdom Atomic Energy Authority) for storage. The irradiated fuel elements contain approximately 16.050 kilograms of uranium enriched to an average of 30.97 percent in the isotope uranium-235 and 16.5 grams of plutonium.

The recovered uranium will be stored in the United Kingdom after reprocessing. Spain plans to ship the recovered uranium to the United States for disposal at some future date.

In accordance with Section 131 of the Atomic Energy Act of 1954, as amended, it has been determined that this subsequent arrangement will not be inimical to the common defense and security.

This subsequent arrangement will take effect no sooner than fifteen days after the date of publication of this notice and after fifteen days of continuous session of the Congress, beginning the day after the date on which the reports required by section 131(b)(1) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2160), are submitted to the Committee on Foreign Affairs of the House of Representatives and the Committee on Foreign Relations of the Senate. The two time periods referred to above shall run concurrently.

Issued in Washington, D.C. on _____.

Edward T. Fei
Acting Director
Office of Nonproliferation Policy
Office of Arms Control
and Nonproliferation

ANALYSIS OF REPROCESSING OF SPECIAL NUCLEAR MATERIAL

Prepared by

Office of Nonproliferation Policy
Office of Arms Control and Nonproliferation
Office of Nonproliferation and National Security
United States Department of Energy

Proposed Reprocessor:

The United Kingdom Atomic Energy Authority

Origin of the enriched uranium:

United States Department of Energy Contracts

TABLE OF CONTENTS

		Page
I.	INTRODUCTION	1
II.	SYNOPSIS OF THE PROPOSED SUBSEQUENT ARRANGEMENT	1
III.	STATEMENT OF UNITED STATES POLICY	1
IV.	EVALUATION OF THE PROPOSED SUBSEQUENT ARRANGEMENT	2
V.	CONCLUSION	2

Annex A: MB-#10 Request for Approval

Annex B: Section 127 and 128 of the Atomic Energy Act of 1954, as amended

Annex C: Section 131 of the Atomic Energy Act of 1954, as amended

Annex D: Safeguards Implementation

I. INTRODUCTION

The Department of Energy (DOE) has received a request from the Government of Spain that the United States approve the reprocessing and storage of the separated uranium in the United Kingdom.

The proposed reprocessing is a "subsequent arrangement" as defined in section 131a(2) of the Atomic Energy Act of 1954, as amended. As required by section 131a(1), the proposed subsequent arrangement will be analyzed herein to determine whether the arrangement will be "inimical to the common defense and security." It will also be analyzed with regard to other relevant provisions of the Atomic Energy Act of 1954, as amended.

II. SYNOPSIS OF THE PROPOSED SUBSEQUENT ARRANGEMENT

The following materials are included in the proposed reprocessing of spent research reactor nuclear fuel:

Fuel Type and Quantity	38 MTR elements
Total U	16.050 Kgs
U-235	4.970 Kgs
U-235 Isotope Content	30.97 %
Produced Pu	16.5 grams
Reprocessing Schedule	As soon as possible

Spanish authorities propose that the irradiated fuel elements, presently located in the United Kingdom for chemical reprocessing and recovery of uranium be reprocessed as soon as possible. The recovered uranium will be retained in the United Kingdom until it can be sent to the United States.

III. STATEMENT OF UNITED STATES POLICY

The policy of the United States concerning nonproliferation and export control was outlined by the President on September 27, 1993. The announcement stated, in part that:

> The United States does not encourage the civil use of plutonium and, accordingly, does not itself engage in plutonium reprocessing for either nuclear power or nuclear explosive purposes. The United States, however, will maintain its existing commitments regarding the use of plutonium in civil nuclear programs in Western Europe and Japan.

While this proposed subsequent arrangement involves reprocessing, it does not involve the civil use of plutonium.

The approval of this request is consistent with the President's policy.

IV. EVALUATION OF THE PROPOSED SUBSEQUENT ARRANGEMENT

The proposed subsequent arrangement has been reviewed to determine whether it satisfies the statutory criteria in section 127 and 128 of the Atomic Energy Act of 1954, as amended, and we conclude that the criteria are satisfied. (See Annex B)

As required by section 131 of the Atomic Energy Act, with the concurrence of the Department of State, and in consultation with the Arms Control and Disarmament Agency, the Nuclear Regulatory Commission, and the Departments of Commerce and Defense, DOE has considered whether the proposed subsequent arrangement will result in significant increase of the risk of proliferation beyond that which existed at the time that approval was requested and has considered whether there would be timely warning "of any diversion well in advance of the time at which the non-nuclear-weapon state could transform the diverted material into a nuclear explosive device."

Together with the Department of State, we have concluded that, taking into account the nonproliferation commitments of the countries involved, where the reprocessing will occur, and the fact that Spanish authorities plan to return the recovered uranium to the United States, this approval will not result in a significant increase of the risk of proliferation.

More specifically, and with regard to the question of proliferation risk, the uranium separated in the reprocessing facility will remain in the United Kingdom until it may be transferred to the United States.

In addition to the above-mentioned plans by Spain, under the terms of the U.S.-European Atomic Energy Community Agreement for Cooperation, the prior approval of the United States would be required for any transfer of the uranium to a country outside European Atomic Energy Community. Such a transfer would constitute a new subsequent arrangement pursuant to section 131 of the Atomic Energy Act and, as such, would have to be considered on its own merits. Moreover, such approval will only be granted under terms consistent with the provisions of the Act, including section 131.

Further, a number of other factors were considered in this case that are relevant to the judgment that the proposed subsequent arrangement will not result in a significant increase in the risk of proliferation. The United Kingdom has evidenced a cooperative attitude in fostering nonproliferation objectives. For example, it supports International Atomic Energy Agency safeguards, adheres to the Nuclear Suppliers Guidelines, and is a party to the Treaty on the Non-Proliferation of Nuclear Weapons.

V. CONCLUSION

DOE has consulted with the Department of State on the nonproliferation aspects of this subsequent arrangement. The Department of State concurs that U.S. nonproliferation objectives would best be fostered by approving the proposed subsequent arrangement.

In summary, it is our view that the terms of the proposed subsequent arrangement satisfy the requirements set forth in section 127, 128, and 131 of the Atomic Energy Act of 1954, as amended, and will not result in a significant increase in the risk of proliferation. Further detailed discussion of these requirements may be found in Annexes B through D of this analysis.

Accordingly, based on the various factors set forth in this analysis, it is the judgment of the Department of Energy with the concurrence of the Department of State and following consultations with the Arms Control and Disarmament Agency (the Arms Control and Disarmament Agency does not intend to prepare a Nuclear Proliferation Assessment Statement with regard to this case), the Nuclear Regulatory Commission, and the Department of Defense, and the Department of Commerce that the proposed "subsequent arrangement" will not be inimical to the common defense and security.

Annex A

OFICINA COMERCIAL DE ESPAÑA

COMMERCIAL OFFICE
EMBASSY OF SPAIN

2558 Massachusetts Avenue, N. W.
Washington, D. C. 20008-2865
Tel. (202) 265-8600
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December 28, 1993

No. 2102 -MC/mmr

Mr. Salvador Ceja
Office of Nuclear Non-Proliferation Policy (IS 40.3)
Office of Arms Control and Nonproliferation
Technology Support
U.S. DEPARTMENT OF ENERGY
1000 Independence Avenue, SW
Washington, D.C. 20585

Attn. Mr. Ted Hart - Fax 586-6789

Dear Mr. Ceja:

We hereby request authorization for the reprocessing of the nuclear research material of US origin retransferred from C.I.E.M.A.T. Madrid to UKEA, Dounreay, United Kingdom under RTD/EU(SP)-22 approved on March 31, 1990, in accordance with the terms of the Agreement for Cooperation dated June 28, 1974, as amended, concerning civil uses of atomic energy between the United States and the Government of Spain.

Please let us know if any additional information is required. The Spanish Authorities in charge would very much like to receive information regarding the established process and time-frame required for approval of this reprocessing authorization. Please send us your initial evaluation and comments.

Thank you in advance for your kind cooperation.

Yours sincerely,

Manuel de la Cámara
Minister for Economic and Commercial Affairs

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TELEFAX

DATE: January 27, 1994

No. 128 - JRF/mmr

TO: Mr. Ted Hart
Office of Nuclear Non-Proliferation Policy
U.S. DEPARTMENT OF ENERGY

Fax 202-586-0936/6789

TOTAL PAGES: 2

TEXT:

Dear Mr. Hart:

We are pleased to provide answers to your questions:

1. The only options available to CIEMAT are:
   - Reprocessing of the material at Dounreay
   - Transfer of the material to the United States

   It is not possible to have the material returned to Spain because the research reactor where the material came from is being dismantled and there is no other installation capable of receiving it.

2. There are no research reactors in Spain now. Therefore, CIEMAT is not interested in the Uranium recovered through reprocessing, and would accept either the possibility of transferring it to the United States without credit or any other use indicated by the Department of Energy.

3. CIEMAT has no objections to having the enrichment of the recovered fuel blended down to less than 20%. The question has been forwarded to UKAEA to find out whether it can be done at their installations.

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Furthermore, our authorities of the Ministry of Industry and Energy indicate that if these 40 fuel elements are not reprocessed at Dounreay, the proposed transfer to the United States would have to take place as soon as possible and, in any case, before September of 1996, when the applicable storage agreement with the british will end. Otherwise, Spain would face a very serious problem.

We hope this information is useful in the approval process.

Thank you very much for your kind cooperation.

Yours sincerely,

José-Ramón Ferrandis
Counselor for Economic and Commercial Affairs

Annex B

Section 127 of the Atomic Energy Act of 1954 as amended

Effective January 1, 1986, Spain and Portugal became members of the European Community and of the European Atomic Energy Community. Also, the November 8, 1958, Agreement for Cooperation between the United States and the European Atomic Energy Community expired December 31, 1985. However, by exchange of notes on December 16 and 17, 1985, the United States and the European Atomic Energy Community, noting that Article V of the Additional Agreement for Cooperation of 1960 incorporates by reference Articles IV, V, VI, XI, XII, XV and Annex B of the November 8, 1958, Agreement for Cooperation, agreed that upon expiration of the November 8, 1958, Agreement on December 31, 1985, the European Atomic Energy Community would hold as subject to the Additional Agreement all materials, equipment, and devices that were subject to the expiring agreement. Thus, the Community has confirmed that all previous U.S. nuclear exports under the expired agreement will continue to be subject to the safeguards and controls described in this analysis.

Section 127(4) provides that the United States may approve a retransfer only if the recipient agrees that the transfer will be subject to the same conditions set forth in that section that would apply to export from the United States in the quoted export criteria. Therefore, the word "export" (or a variation thereof) is equivalent to the word "retransfer" (or a variation thereof). The European Atomic Energy Community has agreed that the material proposed to be retransferred will become subject to the U.S.-European Atomic Energy Community Agrcement for Cooperation and, therefore for the purpose of the discussion below, the material is treated under that agreement as if it had been transferred from the United States.

Criterion (1) - Section 127 (1)

"International Atomic Energy Agency safeguards as required by Article III(2) of the Treaty will be applied with respect to any such material or facilities proposed to be exported, to any such material or facilities previously exported and subject to the applicable Agreement for Cooperation, and to any special nuclear material used in or produced through the use thereof."

All of the ten non-nuclear-weapon state members of the European Community and the United Kingdom are parties to the Treaty on the Non-Proliferation of Nuclear Weapons, as Spain deposited its instrument of accession to the Treaty on November 5, 1987. Each of these ten states (Belgium, Denmark, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain) thus undertook the obligation in Article III(1) of the Treaty on the Non-Proliferation of Nuclear Weapons to accept safeguards of the International Atomic Energy Agency on all nuclear material in all of its peaceful nuclear activities and to enter into an agreement with International Atomic Energy Agency to that effect.

As permitted by Article III(4) of the Treaty on the Non-Proliferation of Nuclear Weapons, those states elected to adhere to a single agreement with the International Atomic Energy Agency (INFCIRC/193). Since as parties to the

Treaty Establishing the European Atomic Energy Community, they had assigned to the European Atomic Energy Community the responsibility and authority to apply safeguards within their territories, the European Atomic Energy Community is also a party to that agreement. The agreement, after approval by the Board of Governors of the International Atomic Energy Agency and the European Community and ratification by each of the then seven non-nuclear-weapon member states, entered into force February 21, 1977. Greece, Spain, and Portugal became parties to this agreement upon entry into the European Atomic Energy Community.

As in the case of all safeguards agreements between the International Atomic Energy Agency and non-nuclear-weapon states pursuant to Article III(1) of the Treaty on the Non-Proliferation of Nuclear Weapons, the agreement with the European Atomic Energy Community and the non-nuclear-weapon member states includes provision for the completion by the parties of "Subsidiary Arrangements", setting forth in detail the manner in which the safeguards procedures called for in the agreement are to be carried out.

International Atomic Energy Agency safeguards as required by Article III(2) of the Treaty on the Non-Proliferation of Nuclear Weapons will be applied to any material and facilities exported to European Atomic Energy Community, to any material and facilities previously exported and subject to the Additional Agreement, and to any special nuclear material used in or produced through the use thereof.

As nuclear-weapon states, France and the United Kingdom are not subject to International Atomic Energy Agency safeguards as required by Article III(2) of the Treaty on the Non-Proliferation of Nuclear Weapons. It is the Executive Branch view that criterion (1) is met with respect to exports to France and the United Kingdom.

In addition, all member states are obligated to accept the European Atomic Energy Community safeguards applied to nuclear material, equipment, and devices subject to the Additional Agreement in each of the member states of the Community, including France and the United Kingdom. Under Article V of the Additional Agreement for Cooperation of 1960, as amended, which incorporates, inter alia, Article XI, XII and Annex B of the November 8, 1958, agreement, European Atomic Energy Community has the responsibility for establishing and implementing a safeguards and control system designed to give maximum assurance that any material supplied by the United States or generated from such supply will be used solely for peaceful purposes ("European Atomic Energy Community Safeguards System"). The Community is bound to consult and exchange experiences with the International Atomic Energy Agency with the objective of establishing a system reasonably compatible with that of the safeguards system of the International Atomic Energy Agency. The European Atomic Energy Community is responsible for establishing and maintaining a mutually (with respect to the United States) satisfactory and effective safeguards and controls system in accordance with stated principles. The European Atomic Energy Community safeguards are applied to material and facilities previously exported and subject to the Additional Agreement and to special nuclear material used in or produced through the use thereof.

France and the United Kingdom, as nuclear weapon states, are not subject to the requirement for safeguards under section 127(1). Nevertheless, both nations have concluded voluntary offers for the application of International Atomic Energy Agency safeguards, under INFCIRC/290 of September 12, 1981 (for France) and INFCIRC/263 of August 14, 1978 (for the United Kingdom).

We would note that the European Atomic Energy Community safeguards system, because of its continuing accountancy and materials control function for the European Atomic Energy Community countries, will remain one of the factors relevant to the judgment of the Executive Branch, under section 126(a)(1), that a proposed export to one of these states will not be inimical to the common defense and security.

Therefore, it is the Executive Branch view that criterion (1) is met with respect to the entire European Atomic Energy Community.

Criterion (2) - Section 127 (2)

"No such material, facilities, or sensitive nuclear technology proposed to be exported or previously exported and subject to the applicable agreement for cooperation, and no special nuclear material produced through the use of such materials, facilities, or sensitive nuclear technology, will be used for any nuclear explosive device or for research on or development of any nuclear explosive device."

The proposed export, and any special nuclear material produced through its use, is to be subject to the Additional Agreement for Cooperation which the Additional Agreement for Cooperation incorporates by reference to Article V. Article XI(1) and (3) of the November 8, 1958, Agreement for Cooperation provides that "no material, including equipment and devices, transferred pursuant to this Agreement" and "no source or special nuclear material utilized in, recovered from, or produced as a result of the use of material, equipment or devices transferred pursuant to this agreement...will be used for atomic weapons, or for research or development of atomic weapons or for any other military purpose." All European Atomic Energy Community member states share the understanding of the United States that the term "atomic weapon" includes any nuclear explosive device. Therefore, we regard their reference under the Additional Agreement for Cooperation to be equivalent to any nuclear explosive device.

Each non-nuclear-weapon state of the Community is a party to the Treaty on the Non-Proliferation of Nuclear Weapons. As such, they are pledged not to manufacture or acquire nuclear explosive devices for any purpose. This no explosive use commitment applies to any material, facilities and sensitive nuclear technology purposed to be exported or previously exported to such state by the United States and to material used in or produced through the use thereof.

Therefore, it is the Executive Branch view that criterion (2) or its equivalent is met with respect to the Community.

Criterion (3) - Section 127 (3)

"Adequate physical security measures will be maintained with respect to such material or facilities proposed to be exported and to any special nuclear material used in or produced through the use thereof. Following the effective date of any regulations promulgated by the Commission pursuant to section 304(d) of the Nuclear Non-Proliferation Act of 1978, physical security measures shall be deemed adequate if such measures provide a level of protection equivalent to that required by the applicable regulations".

The following states in the European Atomic Energy Community have confirmed maintenance of physical security measures providing as a minimum a level of protection comparable to that set forth in INFCIRC/225/Rev.2 for all nuclear material, equipment and facilities imported from the United States as well as nuclear material produced through the use of such material or facilities: Belgium, Denmark, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and the United Kingdom.

France and Germany have provided assurances regarding the maintenance of physical protection at least equal to that defined in Annex B of the Nuclear Supplier Guidelines published by the International Atomic Energy Agency under reference INFCIRC/254, for all nuclear material and installations imported from the United States as well as all nuclear material used in or produced by use of such material and installations. The Department of State, by letter to the Nuclear Regulatory Commission dated October 6, 1978, expressed the view that such an assurance meets the requirements set forth by the Nuclear Regulatory Commission under 10 CFR Part 110.43, pursuant to section 304(d) of the Nuclear Non-Proliferation Act of 1978, in that the levels of protection called for in the Supplier Guidelines were derived directly from INFCIRC/225/Rev.2 and were specifically designed to achieve levels of protection consistent with the physical protection measures in INFCIRC/225/Rev.2.

It is the judgment of the Executive Branch that the United Kingdom has established physical security measures which, as a minimum, meet those recommended in the International Atomic Energy Agency's INFCIRC/225/Rev.2, "The Physical Protection of Nuclear Material."

Therefore, it is the view of the Executive Branch that criterion (3) is met.

Criterion (4) - Section 127 (4)

"No such materials, facilities, or sensitive nuclear technology proposed to be exported, and no special nuclear material produced through the use of such material, will be retransferred to the jurisdiction of any other nation or group of nations unless the prior approval of the United States is obtained for such retransfer. In addition to other requirements of law, the United States may approve such retransfer only if the nation or group of nations designated to receive such retransfer agrees that it shall be subject to the conditions required by this section."

Article XI(2) of the November 8, 1958, Agreement for Cooperation, which the Additional Agreement for Cooperation incorporates by reference in Article V, provides that no material (including equipment and devices) may be transferred beyond the control of the European Atomic Energy Community, unless the United States agrees.

Article I bis D of the Additional Agreement for Cooperation provides that special nuclear material produced through the use of U.S.-supplied material may be exported to any nation outside the European Atomic Energy Community or to a group of nations, provided that such nation or group of nations has an appropriate Agreement for Cooperation with the United States or guarantees the peaceful use of the produced material under safeguards acceptable to the European Atomic Energy Community and the United States. The European Atomic Energy Community's interpretation of this language -- as set out in an April 15, 1977, letter from Fernand Spaak, Head of the Delegation of the Commission of the European Communities, to the Department of State -- is that the European Community Supply Agency, prior to any proposed transfer, will consult with the United States to find out whether, in the view of the United States, the proposed recipient of such produced special nuclear material has an Agreement for Cooperation with the United States which is "appropriate".

During discussions with representatives of the European Community held in Washington on November 1, 1978, the European Atomic Energy Community confirmed that material subject to Article I bis D could not be transferred outside of the Community unless the United States agreed that the recipient countries or group of nations had an appropriate Agreement for Cooperation with the United States or safeguards acceptable to both parties.

Therefore, it is the Executive Branch view that, with regard to the proposed export and special nuclear material produced through its use, criterion (4) is met.

With respect to retransfers within the European Atomic Energy Community, it should be noted that the use of the words "group of nations" in criterion (4) makes clear that no retransfer consent right is required within a group of nations under this criterion. With respect to this provision, the Senate report states:

> "It should be noted that under the U.S.-European Atomic Energy Community Agreements, the United States does have a right of prior approval on retransfers of certain material outside of the European Atomic Energy Community. It should also be noted that paragraph 4 does not require prior approval with respect to transfers within the European Atomic Energy Community, consistent with United States policy of treating that Community as a single (i.e. simple) entity."

The congressional intent not to require U.S. consent rights for transfers within the European Atomic Energy Community is also clear in section 123a(5) of the Atomic Energy Act, as amended, since it requires that the United States seek a guarantee "by the cooperating party" (which in this case is the European Atomic Energy Community as a whole).

Criterion (5) - Section 127 (5)

"No such material proposed to be exported and no special nuclear material produced through the use of such material will be reprocessed, and no irradiated fuel elements containing such material removed from a reactor shall be altered in form or content, unless the prior approval of the United States is obtained for such reprocessing or alteration."

The purpose of this proposed subsequent arrangement is, of course, reprocessing pursuant to article VIII c. of the 1974 U.S.-Spain Agreement for Cooperation. However, European Atomic Energy Community was expressly exempted from criterion (5) by virtue of section 126a(2) of the Act for a period of two years from March 10, 1978, inasmuch as the Department of State notified the Nuclear Regulatory Commission on July 20, 1978, that European Atomic Energy Community has agreed to negotiations with the U.S. as called for in section 404(a) of the Nuclear Non-Proliferation Act of 1978. Executive Order 12840 extends the duration of the period specified in the first provision to section 126a(2) of the Act of March 10, 1994. However, this exemption does not, of course, affect the rights which the United States has under the U.S.-European Atomic Energy Community Agreements for Cooperation and under the commitments from the non-European Atomic Energy Community shipping country (Spain).

Although Portugal and Spain are European Atomic Energy Community members, direct U.S. exports and retransfers of U.S.-origin nuclear materials from outside European Atomic Energy Community are made subject to the existing bilateral agreements with Portugal and Spain. Nuclear material already in Portugal and Spain subject to the bilateral agreements continue to remain subject to those agreements. Those agreements do contain a reprocessing and alteration prior consent rights.

Therefore, in the view of the Executive Branch, criterion (5) or its equivalent is satisfied.

Criterion (6) - Section 127 (6)

"No such sensitive nuclear technology shall be exported unless the foregoing conditions shall be applied to any nuclear material or equipment which is produced or constructed under the jurisdiction of the recipient nation or group of nations by or through the use of any such exported sensitive nuclear technology."

The proposed retransfer does not involve sensitive nuclear technology. Criterion (6), therefore, is not applicable.

Section 128 of the Atomic Energy Act of 1954, as amended

Section 128a(1) of the Atomic Energy Act establishes the following additional criterion: "As a condition of continued U.S. export of source material, special nuclear material, production or utilization facilities, and any sensitive nuclear technology to non-nuclear-weapon states, no such export shall be made unless International Atomic Energy Agency safeguards are

maintained with respect to all peaceful nuclear activities in, under the jurisdiction of, or carried out under the control of such state at the time of the export."

All non-nuclear-weapon states that are members of the European Atomic Energy Community (including Spain) as parties to the Treaty on Non-Proliferation of Nuclear Weapons have agreed to accept International Atomic Energy Agency safeguards on all their peaceful nuclear activities and have implemented that commitment through their agreement with the International Atomic Energy Agency and European Atomic Energy Community (INFCIRC/193).

Annex C

Section 131 of the Atomic Energy Act of 1954, as amended

This request falls under the definition of a subsequent arrangement in section 131a(2)B of the Atomic Energy Act of 1954, as amended (Act), and requires the concurrence of the Department of State and consultation with the Arms Control and Disarmament Agency, the Nuclear Regulatory Commission, the Department of Defense, and Commerce. The Arms Control and Disarmament Agency may, if it deems necessary, prepare a Nuclear Proliferation Assessment Statement. None has been necessary for this subsequent arrangement.

Notice of the proposed subsequent arrangement must appear for at least 15 days in the Federal Register before the retransfer is approved, together with the written determination of the Department of Energy that the arrangement will not be inimical to the common defense and security. This determination has been made. The required Federal Register notice has been published. Under section 131b(1) of the Act, this retransfer cannot be approved until the Committee on Foreign Affairs of the U.S. House of Representatives and the Committee on Foreign Relations of the United States Senate have been provided with a report containing the reasons for entering into the arrangement and a period of 15 days of continuous session has elapsed; provided, however, that the Secretary of Energy (by delegation from the President under E.O. 12058) can declare an emergency due to unforeseen circumstances; then the period shall be 15 calendar days.

The applicable provisions of section 131b of the Act stipulate important criteria that must be taken into account prior to entering into any subsequent arrangement for the retransfer for reprocessing of U.S.-supplied special nuclear materials or of special nuclear materials produced through U.S. assistance. While a distinction is drawn in section 131b(2) and 131b(3) of the Act between facilities which have or have not reprocessed power reactor fuel assemblies or that have or have not been the subject of subsequent arrangements prior to the enactment of the Act, common policy objectives clearly apply to both paragraphs.

These provisions pertain to whether the proposed retransfer (or reprocessing), inter alia, will result in a significant increase of the risk of proliferation beyond that which exists at the time that approval is requested.

Annex C

In particular, section 131b(2) of the Act provides that:

> "(2) The Secretary of Energy may not enter into any subsequent arrangement for the reprocessing of any such material in a facility which has not processed power reactor fuel assemblies or been the subject of a subsequent arrangement therefore prior to the date of enactment of the Nuclear Non-Proliferation Act of 1978 or for subsequent retransfer to a non-nuclear-weapon state of any plutonium in quantities greater than 500 grams resulting from such reprocessing, unless in his judgment, and that of the Secretary of State, such reprocessing or retransfer will not result in a significant increase of the risk of proliferation beyond that which exists at the time that approval is requested. Among all the factors in making this judgment, foremost consideration will be given to whether or not the reprocessing or retransfer will take place under conditions that will ensure timely warning to the United States of any diversion well in advance of the time at which the non-nuclear-weapon state could transform the diverted material into a nuclear explosive device."

Section 131b(3) of the Act provides that:

> "(3) The Secretary of Energy shall attempt to ensure, in entering into any subsequent arrangement for the reprocessing of any such material in any facility that has processed power reactor fuel assemblies or been the subject of a subsequent arrangement therefore prior to the date of enactment of the Nuclear Non-Proliferation Act of 1978 (March 10, 1978), or for the subsequent retransfer to any non-nuclear-weapon state of any plutonium in quantities greater than 500 grams resulting from such reprocessing, that such reprocessing or retransfer shall take place under conditions comparable to those which in his view, and that of the Secretary of State, satisfy the standards set forth in paragraph (2)."

The spent fuel in this case may be reprocessed at the reprocessing facility at the Dounreay site in the United Kingdom; therefore, this retransfer will be made under section 131b(3) of the Act.

Annex D

Safeguards Implementation

The International Atomic Energy Agency Secretariat has noted in its Annual Report for 1991 noted that in carrying out the safeguards obligations of the Agency in 1991, the Secretariat did not detect any event which would indicate the diversion of a significant amount of nuclear material placed under Agency safeguards -- or, with regard to certain agreements, the misuse of facilities, equipment or non-nuclear material subject to safeguards -- for the manufacture of any nuclear weapon, or for any other military purpose, or for the manufacture of any other nuclear explosive device, or for purposes unknown. Inspection activities carried out pursuant to United Nations Security Council Resolution 687 revealed that Iraq has not complied with the obligations under its safeguards agreement to declare certain nuclear activities and place all relevant nuclear material under safeguards. However, it is considered reasonable to conclude that the nuclear material placed under Agency safeguards remained in peaceful nuclear activities or was otherwise adequately accounted for.

The Executive Branch has no reason to believe that the International Atomic Energy Agency Secretariat's report is not valid. In the light of this and other factors associated with the proposed transfer, the Executive Branch believes the framework of commitments, assurances, and safeguards is adequate for the purpose of this proposed transfer.

DRAFT

Mr. Edward T. Fei
Acting Director
Office of Nonproliferation Policy
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, DC 20585

Ref: Your March 1 Memorandum to WClements, DOC, et al.

Dear Mr. Fei:

The Nuclear Regulatory Commission (NRC) has reviewed the proposed subsequent arrangement to reprocess at Dounreay, United Kingdom (UK), 40 irradiated fuel elements, presently stored at Dounreay, that were previously transferred from Spain to the UK for storage, and to have the recovered uranium stored in the UK after reprocessing. It is our understanding that Spain's plans are to transfer the recovered uranium to the U.S. for disposal at some future date, a decision which will need a separate subsequent arrangement approval. The Commission does not object to the approval of the proposed reprocessing.

Sincerely,

Ronald D. Hauber, Director
Division of Nonproliferation, Exports,
and Multilateral Relations
Office of International Programs

DRAFT

ATTACHMENT 2