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**POLICY ISSUE**  
(Notation Vote)

December 21, 1993

SECY-93-348

**FOR:** The Commissioners  
**FROM:** Carlton R. Stoiber, Director  
Office of International Programs  
**SUBJECT:** PROPOSED AMENDMENT TO EXPORT LICENSE XMAT0387 FOR ADDITIONAL  
NUCLEAR GRADE GRAPHITE TO JAPAN

**PURPOSE:**

To request Commission review of the proposed amendment to export additional nuclear grade graphite to Japan. This request is being referred to the Commission because, according to 10 CFR §110.40(a)(3), the Commission will review license applications of 1,000 kilograms or more of nuclear grade graphite.

**BACKGROUND:**

In March 1992 the Commission approved issuance of a license to UCAR Carbon Company, Inc. of Danbury, Connecticut to export 298,035 kilograms (kgs.) of nuclear grade graphite to Japan for use as permanent side reflectors and plenum blocks in the High Temperature Engineering Test Reactor (HTTR), operated by the Japan Atomic Energy Research Institute in Japan (see SECY-92-063 and the Staff Requirements Memorandum dated March 13, 1992). This license was subsequently amended in November of 1992 to authorize the export of an additional 30,000 kgs. of nuclear grade graphite which was required because of machining variations of the graphite blocks (see SECY-92-352 and the Staff Requirements Memorandum dated November 2, 1992). The increase also included a buffer in the event other variations might occur. The licensee has requested another amendment to the license to increase the quantity by an additional 50,000 kgs.

Contact: Betty L. Wright, OIP/ESSC  
504-2342

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

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**DISCUSSION:**

In a letter dated October 19, 1993, the licensee requested a second amendment (Attachment 1) to export license XMAT0387 to increase the quantity of nuclear grade graphite authorized for export from 328,035 kgs. to 378,035 kgs., an increase of 50,000 kgs. The additional material is needed to replace some of the blocks which were shipped and did not meet specifications and to replace some of the blocks that were damaged during final machining in Japan.

**Executive Branch Views**

In response to the NRC's request for views, the Executive Branch, in a letter dated December 14, 1993, recommends that the license amendment be issued to UCAR Carbon Company (Attachment 2). The letter notes that, as a Non-Proliferation Treaty (NPT) party, Japan has committed itself to maintaining International Atomic Energy Agency (IAEA) safeguards on all of its peaceful nuclear activities and has pledged not to produce or otherwise acquire any nuclear explosive device, which satisfies Criteria (1) and (2) for exports of nuclear components, substances, and items under Section 109b of the Atomic Energy Act, as amended. The Executive Branch response further advises that the remaining criterion, agreement not to retransfer any U.S.-supplied component or material without prior U.S. consent, has been satisfied by receipt of a generic assurance letter from the Embassy of Japan. Accordingly, it is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security of the United States and that this export is consistent with the provisions of the Atomic Energy Act of 1954, as amended by the Nuclear Non-Proliferation Act of 1978. No other conditions have been placed on the export by the Executive Branch.

**Staff Assessment**

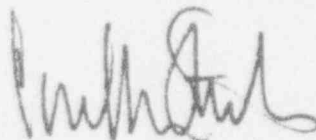
Japan is a party to the NPT and, as such, accepts safeguards on all of its source and special nuclear material in its peaceful nuclear activities. Nuclear grade graphite, however, is not subject to IAEA safeguards pursuant to Article III(2) of the NPT while located in an NPT country. There are no physical protection requirements applicable to the material proposed for export.

**CONCLUSION:**

The staff concurs with the Executive Branch judgment that the proposed export would not be inimical to the common defense and security of the United States and also meets the three specific export licensing criteria of Section 109(b) of the Atomic Energy Act of 1954, as amended.

RECOMMENDATION:

That the Commission authorize the issuance of the requested license amendment to XMAT0387 to UCAR Carbon Company, Inc.



Carlton R. Stoiber, Director  
Office of International Programs

Attachments:

1. 10/19/93 UCAR Ltr JJBainor to USNRC and  
10/28/93 Fax JBainor to BWright, USNRC
2. 12/14/93 DOS Ltr RJKStratford to CRStoiber

Commissioners' comments or consent should be provided directly to the Office of the Secretary by COB Thursday, January 6, 1994.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Wednesday, December 29, 1993, 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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ATTACHMENT 1



XMAT0387/02  
11004515

UCAR CARBON COMPANY INC. 39 OLD RIDGEBURY ROAD, DANBURY, CT 06817-0001

October 19, 1993

U.S. Nuclear Regulatory Commission  
Office of International Programs  
Betty L. Wright - Licensing Officer  
11555 Rockville Pike Mail Station 3H5  
Rockville, MD. 20852

Subject: Request for Amendment to License# XMAT0387

Dear Betty

I am requesting another amendment to License# XMAT0387 which authorizes export of Bulk Nuclear Grade Graphite, in the form of blocks, for use as permanent side reflectors and plenum blocks.

This request for amendment is to increase the quantity of material authorized for export from 328,035 KGS. to 378,035 KGS. an increase of 50,000 KGS.

Attached is a check in the amount of \$8,600 to cover the costs of processing and review. If you require any additional information please contact me immediately at (203) 794-7739. As always, I thank you very much for your assistance and cooperation.

Yours truly

J.J. Bainor  
Import/Export  
Control Specialist

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INT'L SAFEGUARD  
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Remitter	
Check No.	0026782
Amount	\$ 8600
Fee Category	SA
Type of Fee	penal
Date Check Rec'd	11/2/93
Date Completed	11/15/93
By:	Messier

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TO: FAX VMW11d  
FROM: Joe Bainer  
NOTE: TO REPLY TO THIS TELEX, SEND TO DAC CODE VMW.  
START THE MESSAGE WITH THE FOLLOWING INFORMATION.

ATTN: UCDBNC5 (AJJBNC3)  
TO: Joe Bainer  
FROM: ENTER YOUR NAME HERE  
SUBJECT: XMAT0387 Amendment

To: Betty Wright - US NRC Wash. D. C.  
Amendment to License XMAT0387

Betty  
The additional quantity requested on this amendment is for two reasons. First, some of the blocks shipped did not meet specification and were scrapped. Second, during final machining in Japan our customer damaged other blocks rendering them useless. In both cases UCAR Carbon intends to replace the unusable material. I hope this is sufficient. If you need anything else please advise. Thank You and  
Regards Joe Bainer - 203 784-7738

: MRI-00580

EXPORT INT'L SAFEBOARD  
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ATTACHMENT 2



United States Department of State

Washington, D.C. 20520

BUREAU OF POLITICAL-MILITARY AFFAIRS

December 14, 1993

Mr. Carlton R. Stoiber  
 Director, International Programs  
 United States Nuclear Regulatory Commission  
 Rockville, Maryland

PDR  
 DCS / DF02  
 J. Becker, OGC  
 G. Sanslow, OROO  
 B. Stout, MM

Dear Mr. Stoiber:

XMAT0387/0A  
 11004575

I refer to the letter from your office dated November 3, 1993, requesting the views of the Executive Branch as to whether amendment of an export license in accordance with the application hereinafter described meets the applicable criteria of the Atomic Energy Act of 1954, as amended by the Nuclear Non-Proliferation Act of 1978:

NRC No. XMAT0387 -- Union Carbide Chemicals and Plastics Company has requested amendment of license XMAT0387, which currently authorizes the export to Japan of 328,035 kilograms of nuclear grade graphite blocks for use as reflectors and plenum blocks in the HTTR reactor operated by the Japan Atomic Energy Research Institute. The requested amendment would authorize the export of an additional 50,000 kilograms of material for a total of 378,035 kilograms.

It is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security of the United States and is consistent with the provisions of the Atomic Energy Act of 1954, as amended.

As a party to the NPT, Japan has committed itself to maintain IAEA safeguards on all of its peaceful nuclear activities and has pledged not to produce or otherwise acquire any nuclear explosive device. It is therefore the judgment of the Executive Branch that Criteria (1) and (2) for exports of nuclear components, substances and items under Section 109b of the Atomic Energy Act, as amended, are met. The remaining criterion, agreement not to retransfer any U.S.-supplied component or material without prior U.S. consent, has been satisfied by receipt of an assurance letter from the Embassy of Japan, the subject of our letters to you dated October 20, 1978 and March 13, 1979.

On the basis of the foregoing, the Executive Branch recommends that the license be amended as requested.

Sincerely,

*Richard J. K. Stratford*  
 Richard J. K. Stratford  
 Director  
 Nuclear Energy Affairs

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 EXPORT  
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Copies to those listed above on 12/14/93 BK

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