



POLICY ISSUE (Notation Vote)

November 9, 1990

SECY-90-381

For: The Commissioners

From: James R. Shea, Director
International Programs
Office of Governmental and Public Affairs

Subject: PROPOSED LICENSE TO EXPORT NUCLEAR GRADE GRAPHITE
TO GERMANY (XMAT0352)

Purpose: To request Commission review of the proposed license to export 40,000 kilograms of nuclear grade graphite (8,000 kilograms per year for five years) to Germany. 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.

Discussion: On August 9, 1990, HI-Mark Research Ltd., of Brookeville, Pennsylvania, applied for a license to export 40,000 kilograms of bulk graphite (Attachment 1) for use as electrode material for electrical discharge machining. The graphite, which will be cut by the ultimate consignee into semi-finished rounds, squares and rectangles, will be sold to a number of commercial firms for use as electrodes.

Executive Branch Views:

In response to NRC's August 17, 1990 request for views on the proposed export, the Executive Branch, in a letter dated October 19, 1990 (Attachment 2), recommends that a license be issued to HI-Mark Research, Inc. Their justification is that, as an NPT party, Germany has committed itself to maintaining IAEA safeguards on all of their peaceful nuclear activities and has pledged not to produce or otherwise acquire any nuclear explosive devices.

CONTACT:
B. Wright, IP
x20342

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

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90-381 PDR

It is their judgment that Criteria (1) and (2) for exports of nuclear components, substances, and items under Section 109 of the Atomic Energy Act, as amended, are met. In addition, the remaining criterion, agreement not to retransfer any U.S.-supplied component, substance, or item without prior U.S. consent, has been satisfied by the receipt of assurances from EURATOM. Accordingly, it is the opinion of the Executive Branch that the 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:

Germany is party to the NPT and, as such, accepts IAEA safeguards on all their source and special nuclear material in their nuclear activities. Nuclear grade graphite is not subject to IAEA safeguards in NPT countries under Article III(2) of the Treaty. There are no physical security requirements applicable with respect to the end use contemplated by the proposed export.

Conclusion:

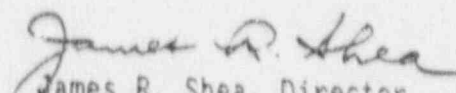
The staff agrees with the Executive Branch judgment that the proposed export would not be inimical to the common defense and security of the United States and meets the three specific export licensing criteria of Section 109(b) of the Atomic Energy Act of 1954 as amended.

Recommendation:

That the Commission authorize the issuance of the requested license to HI-Mark Research Ltd.

Scheduling:

The 60-day period for Commission review of application XMAT0352 expires on December 22, 1990. The 120-day period expires on February 20, 1991.


James R. Shea, Director
International Programs
Office of Governmental
and Public Affairs

Attachments:
(2) as stated

Commissioners' comments or consent should be provided directly to the Office of the Secretary by C&B Friday, November 23, 1990.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Friday, November 16, 1990, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

DISTRIBUTION:

Commissioners

OGC

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GPA

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SECY

APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT (See instructions on Reverse)

1. APPLICANT'S USE 8-9-90		2. NRC USE		3. DOCKET NO. 11004338		4. LICENSE NO. XMAP 352	
3. APPLICANT'S NAME AND ADDRESS Hi-Mark Research, Ltd. R.D. 1, Box 227 Brookville, PA 15825 (814) 849-8006				4. SUPPLIER'S NAME AND ADDRESS (Complete if applicant is not supplier of material)			
5. FIRST SHIPMENT SCHEDULED 8-30-90		6. FINAL SHIPMENT SCHEDULED 12-30-90		7. APPLICANT'S CONTRACTUAL DELIVERY DATE 9-30-90		8. PROPOSED LICENSE EXPIRATION DATE 5 years from issuance of license	
10. ULTIMATE CONSIGNEE a. NAME: Simon & Partner b. STREET ADDRESS: Leipziger Ring 101, D-6054 Rodgau 3 c. CITY - STATE - COUNTRY: West Germany				11. ULTIMATE END USE (Include plant or facility name) Electrode material for electrical discharge machining. Explained in more detail in attached letter.			
12. INTERMEDIATE CONSIGNEE				11a. EST. DATE OF FIRST USE: 8-15-90			
14. INTERMEDIATE CONSIGNEE				13. INTERMEDIATE END USE			
16. NRC USE				15a. EST. DATE OF FIRST USE			
17. DESCRIPTION (Include chemical and physical form of nuclear material; give dollar value of nuclear equipment and components) Bulk nuclear grade graphite See attached property sheets		18. MAX. ELEMENT WEIGHT 8,000 per year for the next 5 years		19. MAX. WT. % 40,000 total		20. MAX. ISOTOPE WEIGHT kg	
22. COUNTRY OF ORIGIN - SOURCE MATERIAL USA		23. COUNTRY OF ORIGIN - SNM WHERE ENRICHED OR PRODUCED N/A		24. COUNTRIES WHICH ATTACH SAFEGUARDS (If Known) N/A			
25. ADDITIONAL INFORMATION (Use separate sheet if necessary) See attached cover letter							
26. The applicant certifies that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information in this application is correct to the best of his/her knowledge.							
27. AUTHORIZED OFFICIAL		a. SIGNATURE <i>[Signature]</i>			b. TITLE V.P. Marketing & Sales		

HI-MARK RESEARCH, LTD.

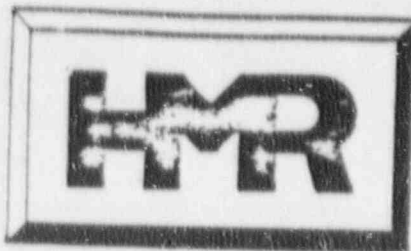
XMA7035
11004338

PENETRATOR

PREMIUM EDM GRAPHITE

	<u>MARK 7</u>	<u>MARK 5</u>	<u>MARK 1</u>
APPARENT DENSITY (g/cc)	1.75	1.83	1.87
FLEXURAL STRENGTH (psi)	8,200	11,500	12,500
SPECIFIC RESISTANCE ($\times 10^{-5}$ ohm-in.)	68	65	69
HARDNESS, SCLEROSCOPE	68	78	83
GRAIN SIZE, MICRONS	7	5	1
INCHES	.0003	.0002	.00004
COLOR CODE	WHITE	RED	BLUE
SUGGESTED APPLICATIONS	FINISHING	DETAIL	FINE DETAIL

6/90



HI-MARK RESEARCH LTD.

R.D. #1, Box 227
Brookville, PA 15825
Phone: 814-849-8006/8007

XMAT0352
11004338

August 9, 1990

Betty Wright, Licensing Officer
International Programs
Office of Governmental and Public Affairs
U.S. Nuclear Regulatory Commission
Washington, DC 20555
Mail Station 3-H-5

Dear Ms. Wright:

Hi-Mark Research, Ltd. continues to expand its markets globally. Currently, we hold the following NRC export licenses:

XMAT 0344 Japan
XMAT 0345 Japan
XMAT 0346 Canada, U.K., Netherlands
XMAT 0347 Korea

The Korean license XMAT 0347 will cover our short-term situation. We are now applying for a long-term license to export to Korea to cover quantities greater than 1,000 kilograms. At the same time, we are applying for a short-term license for West Germany for 900 kg and for a long-term license for West Germany for quantities greater than 1,000 kilograms. For convenience, the long-term license applications for Korea and West Germany may be combined.

Sincerely,

Gregg A. Johnson
V.P. Marketing and Sales

GAJ:rds

EXPORT IMPORT
INT'L SAFEGUARDS

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U.S. N.R.C.



United States Department of State

Washington, D.C. 20520

BUREAU OF OCEANS AND INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AFFAIRS

October 19, 1990

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

Mr. James R. Shea
Director of International Programs
United States Nuclear Regulatory Commission
Rockville, Maryland

Dear Mr. Shea:

I refer to the letter from your office of August 17, 1990, requesting Executive Branch views as to whether issuance of export licenses in accordance with the applications hereinafter described meet the applicable criteria in the Atomic Energy Act, as amended by the Nuclear Non-Proliferation Act of 1978:

NRC No. XMAT0351 and XMAT0352 — Applications by Hi-Mark Research Ltd., Inc. to authorize export to the Federal Republic of Germany of 900 kilograms of nuclear grade graphite to meet immediate needs in the next few months and 40,000 kilograms of nuclear grade graphite over a five year period for manufacture of electrodes for electrical discharge machining. Shipments under XMAT0342 for longer term needs would amount to 8,000 kg per year.

It is the judgment of the Executive Branch that the contemplated 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.

As an NPT party the FRG has committed itself to maintaining 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 109 of the Atomic Energy Act, as amended, are met.

The remaining criterion regarding agreement not to retransfer any U.S.-supplied component or material without prior U.S. consent has been satisfied for the FRG by a letter dated January 25, 1979, from the Delegation of the Commission of the European Communities confirming that exports from the U.S. to the European Community of nuclear components specially designed or prepared for use in a nuclear facility, deuterium (including heavy water) and reactor-grade graphite:

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U.S. DEPT. OF STATE
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EXPORT IMPORT
INT'L SAFEGUARDS

Copy to Shea listed above on 10/23/90. BK

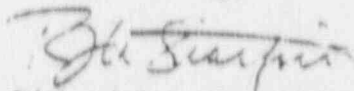
A) fall within the category of "material, including equipment and devices" in Article XI of the Agreement for Cooperation under the U.S.-EURATOM Cooperation Agreement and are thus subject to the guarantees in the article; and

B) will be transferred under the U.S.-EURATOM Cooperation Agreement and thus be subject to the guarantees in that article; and

These guarantees include a pledge of no explosive use and no retransfer beyond the jurisdiction of the Community without prior U.S. approval.

On the basis of the foregoing, the Executive Branch recommends that the license be issued.

Sincerely,



Richard J. K. Stratford
Deputy Assistant Secretary
Nuclear Energy & Energy Technology Affairs