

POLICY ISSUE
NOTATION VOTE

SECY-00-0127

June 9, 2000

FOR: The Commissioners
FROM: Janice Dunn Lee, Director
Office of International Programs
SUBJECT: PROPOSED LICENSE TO EXPORT NUCLEAR GRADE GRAPHITE TO VARIOUS COUNTRIES FOR NON-NUCLEAR END USE (XMAT0400)

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PURPOSE:

To request Commission review of the proposed issuance of a license to Poco Graphite involving the export of nuclear grade graphite. The application is being referred to the Commission in accordance with [10 CFR 110.40\(b\)\(3\)](#).

DISCUSSION:

On December 3, 1999, Poco Graphite applied for a new license ([Attachment 1](#) ) to replace existing license XMAT0326, issued July 8, 1986. The new application requests authority to export 750 short tons (680,385 kilograms) of nuclear grade graphite for non-nuclear end use to European Union countries and Argentina, Australia, Bolivia, Brazil, Brunei, Canada, Chile, China/Hong Kong, Colombia, Costa Rica, Czech Republic, Ecuador, Egypt, Guatemala, Hungary, Indonesia, Jamaica, Japan, Malaysia, Mexico, New Zealand, Norway, Panama, Paraguay, Peru, Philippines, Poland, Romania, Saudi Arabia, Singapore, South Africa, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, Uruguay and Venezuela. The applicant also requests authority to increase the existing limit on individual pieces of graphite from 400 to 700 kilograms, but has not requested any change to the current limit per shipment of 18,000 kilograms.

The graphite produced by Poco Graphite for its domestic and foreign industrial users is very pure (as is much of the graphite currently produced in the U.S. and abroad) and meets the definition of nuclear-grade graphite in [10 CFR 110.2](#), having a boron equivalent content of less than 5 parts per million and density greater than 1.5 grams per cubic centimeter. Bulk shipments of such graphite are controlled by the United States and other members of the Nuclear Suppliers Group to help prevent its use as a moderator or reflector material in an un-safeguarded reactor.

In response to NRC's request for views on the proposed export, the Executive Branch, in a letter dated April 21, 2000 ([Attachment 2](#) ) , recommends that the license be issued to Poco Graphite, but limited to the quantities specified above and to the following destinations: member states of the European Union, Canada, Czech Republic, Japan, New Zealand, Romania, Singapore, Switzerland and Taiwan. This recommendation excludes countries on the application which have not provided the necessary assurances to the U.S. Government on re-transfers. (The applicant has been advised in this regard and indicated a possible interest in later amending the new export license to reinstate some excluded countries, if and when they provide such assurances.)

It is the Executive Branch judgment that the proposed exports under the new license will not be inimical to the common defense and security of the United States and are consistent with the provisions of the Atomic Energy Act, as amended, if limited to the countries/destinations and quantities as specified above. The Executive Branch letter notes that, as parties to the Non-proliferation Treaty (NPT), all of the countries/destinations have committed to maintain IAEA safeguards on all of their peaceful nuclear activities and have pledged not to produce or otherwise acquire any nuclear explosive device, therefore satisfying criteria (1) and (2) of Section 109b of the Atomic Energy Act, as amended, for exports of nuclear components, substances and items.

The remaining criterion, agreement not to retransfer any of the U.S.-supplied components, heavy water or nuclear grade graphite without prior U.S. consent, has been satisfied by receipt of generic assurances from all the countries/destinations, except Singapore, listed in the above proviso. These generic assurances confirm the right of U.S. prior consent to re-transfers of U.S.-origin nuclear components, heavy water and nuclear grade graphite. The new two year Import and Delivery Verification Certificate (IDVC) dated February 1, 2000, provided by the Government of Singapore confirms that there will be no retransfer of the U.S.-supplied graphite to any other country without prior U.S. Government consent except to ASEAN countries-Brunei, Indonesia, Malaysia, Philippines and Thailand, all of which are parties to the NPT.

The EB advises that the validity of the license should be limited to the expiration date of the current Singapore IDVC and the license should be conditioned to limit re-exports to ASEAN countries by Singapore to manufactured non-nuclear articles or general license quantities of bulk graphite. No other conditions have been placed on the export by the Executive Branch.

CONCLUSION:

The staff concurs with the Executive Branch judgment that the proposed export, as modified, 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 109b of the Atomic Energy Act of 1954, as amended. There are no applicable international safeguards or foreign physical protection requirements for the proposed export.

RECOMMENDATION:

That the Commission authorize the issuance of the requested license to Poco Graphite with the modifications to authorized destinations as recommended by the Executive Branch.

/RA by Ronald D. Hauber Acting For/

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Attachments:

1. [12/3/99 Poco Graphite Export License Application](#) 
2. [4/21/00 DOS Ltr RJStratford to JDLee](#) 