CARPENTER

TECHNOLOGY CORPORATION

SPECIAL PRODUCTS DIVISION PO BOX 20536, SAN DEGO, CALIFORNIA 92120 (714) 448-1000

DATE: December 5, 197

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ADDENDUM TO

EXPORT LICENSE APPLICATION

FOR BOILING WATER REACTOR ZIRCALOY-4 FUEL CHANNELS

The following information is given in accordance with that information which is required by Paragraph 110.31, General Requirements of LOCFR Part 110.

a. Name and U.S. address of applicant:

Carpenter Technology Corporation Special Products Division Post Office Box 20536 San Diego, California 92120

b. Name and address of supplier of equipment and material, if different from the applicant:

None

c. Name and address of ultimate consignee:

Hamburgische Electricitäts-Werke Hamburg, Germany

d. Name and address of intermediate consignee:

Kraftwerk Union Aktiengesellschaft Erlangen, Germany

e. Date of proposed first shipment:

August, 1979

f. Date of proposed completion of final shipment:

August, 1979

g. Contractual delivery date, if established:

N/A

h. Proposed expiration of export license:

January 1, 1980

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CARPENTER TECHNOLOGY CORPORTION Special Products Division Post Office Box 20536 San Diego, California 92120

Date: 12/5/78

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EXPORT LICENSE APPLICATION FOR BOILING WATER REACTOR ZIRCALOY-4 FUEL CHANNELS, continued.

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i. End use of material by all consignees:

Original equipment, core components for KKK Reactor.

Additional information as required by Paragraph 110.32, Additional Requirements of 10CFR Part 110.

a. General description of equipment:

848 each, Zircaloy-4 alloy fuel channels. These fuel channels are 3 mm, 5.278" inside diameter by approximately 167 inches in length. The cross section of the tube is square with equal sides. The normal use for these fuel channels is to serve as a water flow chimney for boiling water reactor fuel.

b. Design power level:

1260 megawatts electric

c. Name of installation:

Kernkraftwerk Kruemmel GmbH (KKK)

d. Location of where equipment is to be used: Geesthacht-Kruemmel/Elbe, Germany

e. Date when equipment is needed abroad: Fourth quarter of 1979.

f. Total dollar value of all items to be exported under the requested license: \$2,900,160.00

g. List of items to be exported:

Boiling water reactor fuel channels would be classified under Zirconium Tubes, as listed in Appendix A of Nuclear Equipment, Item A(6).



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SPECIAL PRODUCTS DIVISION P.O. BOX 20536, SAN DEGO, CALFORNIA 92120 (714) 448-1000

December 6, 1978

U.S. Nuclear Regulatory Commission Export/Import and International Safeguards Office of International Program Washington, D.C. 20555

Attention: Ms. Elaine Hemby, MNBB Mail Stop 8215

Subject: Export License Application for Zircaloy-4 Fuel Channels

Reference: Carlech SPD Job 13535 - KKK

Gentlemen:

Carpenter Technology Corporation, Special Products Division requests an export license for the purpose of exporting Zircaloy-4 fuel channels to Germany. The information, as required per 10CFR Part 110, is attached. Also, you should be aware that a license was obtained earlier for this same product and because of several delays in constructing the reactor, these parts were not shipped and the license and subsequent extensions expired, therefore, the request for a new license. Attached is a copy of the original license and the communication denying a further extension for your information.

If you should have any questions concerning this license application, please feel free to contact me. Thank you for your cooperation and help in advance.

Very truly yours, CARPENTER TECHNOLOGY CORPORATION Special Products Division

D. C. Bristol General Sales Manager

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