TRANSNUCLEAR, INC.

1980 JUN 19 AM 9 02

June 18, 1980

Mr. N. Moore
Nuclear Regulatory Commission
Office of International Programs
7735 Old Georgetown Road
Bethesda, Maryland 20014

XSNM01679
11002051

Re: Export License Application XSNM 1679
TN Ref: 80-104/01 (NUK-326)

Dear Mr. Moore:

Attached is a copy of a letter which we received from Nukem GmbH, F.R.G. indicating that a correction should be made on the supplemental information submitted to you with our license application dated April 30, 1980.

Also for your information are copies of supplemental data which have been sent by Nukem GmbH, directly to Dr. Travelli at Argonne National Laboratory.

Please insure that copies of the above referenced documentation is forwarded to appropriate officials within U. S. Executive Branch.

Thanking you in advance for your help and cooperation.

Sincerely,

Vicki Matson
Assistant Manager
Washington Operations

Enclosure: as stated above

cc: Mr. J. Marchal/Euratom
with enclosure

VM/ak

ONE SKYLINE PLACE • 3205 LEESBURG PIKE • FALLS CHURCH, VIRGINIA 22041
TELEPHONE: 703-820-2450 • CABLE: TRANSNUC FSCH • TELEX: 89-9463

NUKEM GmbH
Postfach 110080
D-6450 Hanau 11
Tel. (0 61 81) 5 00-1
Telex 4184113 nuk d

1980 JUN 19 A 9 01

Transnuclear Incorp.
attn. Mrs. Vicky Matson

Skyline Center
5205 Leesburg Pike
Falls Church, Va. 22041

U S A

11th June 1980
HM/rot

Re: Procurement of further 35 kgs of highly enriched uranium (93 % U-235 enriched) for Studsvik Energiteknik

Dear Mrs. Matson,

We revert to our letter dated April 24, 1980 with which we submitted to you an "End-Use-Statement" as well as the "Reactor Checklist" in order to apply for a further US-export license.

Please note that the complement to the checklist of Studsvik Energiteknik contains a typing error. In the third line it should read during 1980 - 1981 instead of 1979 - 1980.

We ask you to advise NRC accordingly, and remain,

kind regards,

N U K E M GmbH

(C. Calhoun) (H. Müller)

NUKEM GmbH
Postfach 110080
D-6450 Hanau 11
Tel. (0 61 81) 5 00-1
Telex 4184113 nuk d

Argonne National Laboratory
Reactor Physic Department

attn. Dr. A. Travelli

9700 South Class Avenue
Argonne, Ill. 60439

U S A

June 11, 1980
HM/rot

Re: Export license application no. XSNM-1679 covering 35 kgs of highly enriched uranium (93 % U-235) for the reactor R-2 operated by Studsvik Energiteknik Sweden

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Dear Dr. Travelli,

Please be advised that our subsidiary Transnuclear Inc., Falls Church, has applied for a further US-export license -- for 35 kgs of HEU for the reactor R-2.

As enclosure we submit you the original of a complement to the "Reactor-Checklist" which we have submitted to NRC together with the application for granting the US-export license.

In this complement Studsvik Energiteknik state their future planning with regard to the core conversion from HEU to LEU.

.../2

We trust that this statement of Studsvik Energiteknik is helpful to you for the economic and technical justification of the license application, and remain,

kind regards,

N U K E M GmbH

(C. Colhoun) (H. Müller)

Encl.

SVÄK

Datum - Date
1980-06-04
Ert datum - Your date

Vår referens - Our reference
EBg/MAg
Er referens - Your reference

Ärendet handläggare - Matter handled by
E Blomberg

EINGANG
9. JUNI 1980
Abteilung DL

Nukem GmbH
Mr. H Müller
D-6450 HANAU 11
Postfach 110080
Förbundsrepubliken Tyskland

Re: Procurement of 35 kgs highly enriched uranum in form of UF6 - XSNM 1679.

Enclosed please find a "complement to the checklist dated March 20, 1980." Please distribute the letter to the involved authorities.

Kind regards,

E. Blomberg

E Blomberg

03 JUNI 80 1320
H.M.

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STUDSVIK ENERGITEKNIK AB 1980-06-03

COMPLEMENT TO CHECKLIST DATED March 20, 1980.

Studies of the possibility to use reduced enriched uranium in the R2 fuel elements.

The Swedish research reactor R2 extensively utilized for irradiation testing of fuel for different types of power reactors.

The reactor is very well suited for this types of experiments and large efforts have been put into development of testing equipment and methods.

Besides the domestic fuel R&D-program the owner Studsvik Energiteknik AB has also organized a number of international cooperative fuel testing programs, sponsored by a great majority of the LWR fuel manufacturers in the world and also by utilities, research institutes and authorities in different countries. STUDSVIK has initiated different studies for investigating the possibility of converting the reactor to the use of lower enriched fuel. These studies comprise reactor physics, fuel utilization, safety and economical and operational impacts.

Some of these studies are done in cooperation with Argon National Laboratory.

A tentative schedule for these studies is as follows:

Dec 1979	Start phase A: Survey of the fuel element design of 20% enrichment with potential for successful demonstration and commercial availibility (design survey).
June 1980	Start phase B: Detailed evaluation of selected fuel element design with 20% enrichment. Preparation of irradiation test. Element procurement. All activities except for final order.

Dec 1980	Start phase C: Analytical studies on irradiation plans and mixed cores.
Aug 1981	Start irradiation
May 1982	50% burn-up
Feb 1983	End extended burn-up
Spring 1983	Phase D: Order new core.