

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

A CC

1. APPLICANT'S USE		a. DATE OF APPLICATION 7/31/79		b. APPLICANT'S REFERENCE TNP 293 79-221/01		2. NRC USE		a. LICENSE NO. XSNM01552		b. DOCKET NO. 11000748	
3. APPLICANT'S NAME AND ADDRESS						4. SUPPLIER'S NAME AND ADDRESS					
a. NAME Transnuclear, Inc.						a. NAME U.S.D.O.E. c/o Union Carbide Corp.					
b. STREET ADDRESS One Skyline Place, 5205 Leasburg Pike						b. STREET ADDRESS K-25 Plant O.R. TN or Goodyear Atomic Corp., Route One, Piketon, Ohio					
c. CITY Falls Church			STATE Va.		ZIP CODE 22041		c. CITY			STATE ZIP CODE	
d. TELEPHONE NUMBER (Area Code - Number - Extension) 703-820-2450						c. CITY					
5. FIRST SHIPMENT SCHEDULED 2/82		6. FINAL SHIPMENT SCHEDULED 6/82		7. APPLICANT'S CONTRACTUAL DELIVERY DATE same as item 5 & 6		8. PROPOSED LICENSE EXPIRATION DATE One year from date of issuance		9. U.S. DEPARTMENT OF ENERGY CONTRACT NO. (If Known) UES/SA/101			
10. ULTIMATE CONSIGNEE						11. ULTIMATE END USE					
a. NAME Electricity Supply Commission						a. NAME Will be used as first core of Koeberg Unit 2 Nuclear Power Plant. (See attached E.U.S.)					
b. STREET ADDRESS P.O. Box 1091, Johannesburg 2000						11a. EST. DATE OF FIRST USE					
c. CITY - STATE - COUNTRY Republic of South Africa						13. INTERMEDIATE END USE					
12. INTERMEDIATE CONSIGNEE						13. INTERMEDIATE END USE					
a. NAME Franco-Belgian Fuel Company (F.B.F.C.)						Conversion from UF6 to UO2 and fuel fabrication (See attached E.U.S.)					
b. STREET ADDRESS Romans 26100						13a. EST. DATE OF FIRST USE					
c. CITY - STATE - COUNTRY France						15. INTERMEDIATE END USE					
14. INTERMEDIATE CONSIGNEE						15. INTERMEDIATE END USE					
a. NAME Transnucleaire, S.A.						Intermediate for transport purposes only.					
b. STREET ADDRESS 11 bis rue Christophe Colomb						15a. EST. DATE OF FIRST USE					
c. CITY - STATE - COUNTRY 75 Paris 8 France						15a. EST. DATE OF FIRST USE					
16. NRC USE		17. DESCRIPTION (Include chemical and physical form of nuclear material; give dollar value of nuclear equipment and components)				18. MAX. ELEMENT WEIGHT		19. MAX. WT. %	20. MAX ISOTOPE WT.	21. UNIT	
		Uranium in the form of uranium hexafluoride enriched to a maximum of 3.15 percent U235				73556.4 KgU		3.15% U235	1816.23 Kg U235	Kg	
		RECEIVED U.S. NRC 1979 AUG 1 AM 10 54									
22. COUNTRY OF ORIGIN - SOURCE MATERIAL			23. COUNTRY OF ORIGIN - SNM WHERE ENRICHED OR PRODUCED			24. COUNTRIES WHICH ATTACH SAFEGUARDS (If Known)					
			INTERNATIONAL SAFEGUARDS								
25. ADDITIONAL INFORMATION (Use separate sheet if necessary)											
7909040 015 909112											
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						b. TITLE		
									Asst. Mgr. Washington Operations		

79 221/01

ANNEX 1 (B)
ELECTRICITY SUPPLY COMMISSION

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TELEGRAMS - 86691
TELEKS

TELEPHONE 800-8111 P.O. BOX 1091 JOHANNESBURG 2000
TELEFON 800-8111 POSBUS



MEGAWATT PARK
MAXWELL DRIVE
SUNNINGHILL EXT. 3
SANDTON

MEGAWATT PARK
MAXWELLYLAAN
SUNNINGHILL UITBR. 3
SANDTON

CABLES/TELEGRAMS
"ESCOM"

KABELS/TELEGRAMME
"EVKOM"

ELEKTRISITEITSVOORSIENINGSKOMMISSIE

TO WHOM IT MAY CONCERN

U Verw./Your Ref

Oms Verw./Our Ref

Navrae/Enquiries

Datum/Date

13 July 1979

Sirs

KOEBERG NUCLEAR POWER STATION UNIT NUMBER 2
END USE STATEMENT : TECHNICAL DATA

Enrichment Contract Number E-(49-14)-UES/SA/101 with US-DOE (formerly US-ERDA) for Koeberg Unit 2.

In the frame of the above Contract, enriched uranium is to be delivered by US-DOE as UF₆ in accordance with the following schedule:

Maximum Quantity (kg U as UF ₆)	Maximum Assay % U ₂₃₅	Maximum Content in U ₂₃₅ (kg U ₂₃₅)	Delivery Date
24 710	1,8	444,780	February 1982
24 240	2,4	581,760	April 1982
24 240	3,1	751,440	June 1982

The application for the export licence for the above material will be made to the United States Authorities by Transnuclear Inc., Skyline Centre, 5205 Leesburg Pike, Falls Church, Virginia 22041, USA.

We certify that the above material will be used in the Republic of South Africa, as first core of the Koeberg Unit 2 Nuclear Power Plant.

Intermediate consignee will be : 1979 AUG 1 AM 11 54
Franco-Belgian Fuel Company (F.B.F.C.), Romans 26100, France, for conversion of UF₆ to UO₂ and fuel fabrication.

Yours faithfully

Jan H. Smith
GENERAL MANAGER

EXPORT/IMPORT
AND
INTERNAT'L SFGDRS

960113

ELECTRICITY SUPPLY COMMISSION

TELEPHONE - 800 8111
TELEFOON

P.O. BOX - 1091, JOHANNESBURG 2000
POSBUS

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TELEX - 86691
TELEKS



MEGAWATT PARK
MAXWELL DRIVE
SUNNINGHILL EXT. 3
SANDTON

MEGAWATT PARK
MAXWELLRYLAAN
SUNNINGHILL UITBR. 3
SANDTON

CABLES/TELEGRAMS
"ESCOM"

KABELS/TELEGRAMME
"EVKOM"

FRAMATOME (Fuel Projects Division)
Tour Fiat
Cedex 16
92084 PARIS LA DÉFENSE
FRANCE

Attention : Messrs Simon and Peyran

U Verv./Your Ref.

Ons Verv./Our Ref.

Navrae/Enquiries

Datum/Date

OPN 11230
Letter Number 45

20 June 1979

NUCLEAR SECRET

IN DUPLICATE

ARRIVÉE CPK le 29/6/79
ACTION CP ; C ;
DIFFUSION sans P.J avec E.J C/CA CPK
CLASSEMENT Avec P.J A.S CP Doc N°

Sirs

KOEBERG NUCLEAR POWER STATION - CONTRACT OPN 11230
APPLICATION FOR EXPORT PERMIT

The enriched uranium to be used by Framatome for the fabrication of fuel elements supplied under the foregoing contract is to be enriched in the facilities operated for the Department of Energy in the United States of America. You require to obtain export licences from the relevant authorities in the United States. The applications for the licences will be made on your behalf by Transnuclear Inc., Skyline Centre, 5205 Leesburg Pike, Falls Church, Virginia 22041, USA. The material is to be consigned to the Franco-Belgian Fuel Company, Romans 26100, France.

To enable you to apply for the export permits I attach as Annex I the relevant technical data for use in the preparation of the End Use Statements. I also attach as Annex II background information and statements to support the application for the permits. Please arrange for this information to be attached to the application for the guidance of the United States Authorities.

Please do not hesitate to let me know if further information is required for the preparation of, or to support the application.

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Yours faithfully

Jan H. Smith

Jan H. Smith
GENERAL MANAGER

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EXPORT/IMPORT
AND
TRAFFIC SERVICES

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ANNEX I

KOEBERG NUCLEAR POWER STATION, UNITS 1 & 2
END USE STATEMENT : TECHNICAL DATA

Enrichment Contract Numbers E-(49-14)-UES/SA/100 and UES/SA/101 with US-DOE (formerly US-ERDA) for Koeberg Units 1 and 2 respectively.

In the frame of the above Contract, enriched uranium is to be delivered by US-DOE as UF_6 in accordance with the following schedule :

Maximum Quantity (kg U as UF_6)	Maximum Assay % U_{235}	Maximum Content in U_{235} (kg U_{235})	Delivery Date
Koeberg Nuclear Power Station - Unit Number 1 Initial Core Loading			
24 710	1,8	444,780	February 1981
24 240	2,4	581,760	April 1981
24 240	3,1	751,440	June 1981
Koeberg Nuclear Power Station - Unit Number 2 Initial Core Loading			
24 710	1,8	444,780	February 1982
24 240	2,4	581,760	April 1982
24 240	3,1	751,440	June 1982

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AND
INTERNATIONAL SFORDS

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ANNEX II

KOEBERG NUCLEAR POWER STATION, UNITS 1 AND 2 END USE STATEMENT : BACKGROUND INFORMATION AND STATEMENTS

The following information and statements are being supplied by the Electricity Supply Commission ("ESCOM") of the Republic of South Africa to explain and support the End Use Statements submitted by Transnuclear Inc. for the purpose of obtaining an export licence for quantities of enriched uranium hexafluoride required for the manufacture of fuel elements for Units 1 and 2 of the Koeberg Nuclear Power Station.

ESCOM is a South African public corporation which was established in 1923 in accordance with the Electricity Act No. 42 of 1922. The function of ESCOM is to provide a cheap and abundant supply of electricity in the Republic of South Africa. It supplies 90% of the electricity used in South Africa and exports electricity to the neighbouring territories of Bophuthatswana, Lesotho, Mozambique, South West Africa/Namibia, Swaziland, Transkei and Zimbabwe/Rhodesia. Whilst ESCOM provides an annual report to the South African Parliament on its technical and financial activities it is responsible for raising its own funds and receives no financial support from the government.

The Koeberg Nuclear Power Station is being constructed on the farm Duynfontein, approximately 28 km north of the city of Cape Town in the Cape Province of the Republic of South Africa. Unit 1 of the station is due to enter commercial operation at the end of 1982 and Unit 2 one year later. The construction of both units is currently on schedule and these dates are expected to be met. The units are based on three loop PWR Nuclear Steam Supply Systems provided by FRAMATOME under licence from Westinghouse. Each unit will have an output of 920 MW electric.

The power requirements of the Western Cape are presently met by a number of small fossil fueled power stations in the region, supplemented by supplies from the national grid system via transmission lines.

The present load growth in the region is such that local generation plus grid supplies would be inadequate to meet demands by the early years of the next decade. ESCOM is required to determine which energy resource can most economically provide the electric power requirements of a given geographical area.

Based on major system studies in the early 1970's the decision was taken to build the Koeberg Nuclear Power Station to meet the load demands of the early 1980's. A further consideration was the desirability of conserving scarce water resources in inland areas.

The decision to proceed with units 1 and 2 for Koeberg led to the conclusion in 1974 of contracts between the United States of America and ESCOM for the supply of enrichment services. ESCOM's commitment to the construction and bringing into operation of the project, including all the nuclear fuel services, is irrevocable and there are no plans to reconsider or delay the project.

The fuel proposed to be exported would be subject at all times to the Agreement for Cooperation between the United States of America and the Union of South Africa, signed July 8, 1957, as amended, including the peaceful use assurances contained in Articles III.B., X.A., and XI(2), as well as the trilateral agreement between the United States, South Africa and the International Atomic Energy Agency, signed July 26, 1967. It also would be governed by the exchange of notes between the Governments of South Africa and the United States, dated May 22, 1974, regarding peaceful nuclear explosives. The fuel will be used for the manufacture of fuel elements for Units 1 and 2 of the Koeberg Nuclear Power Station.

ESCOM is prepared to arrange for the safe storage, permanent disposal or reprocessing of fuel after its use in the power station, in accordance with such arrangements as may be agreed with the governments of the United States of America and France and with the International Atomic Energy Agency. To assure the United States of America that ESCOM will use the enriched material in question only for peaceful purposes, ESCOM is willing to send the fuel once used back to the United States of America in accordance with President Carter's spent fuel offer of October, 1977.

The enrichment levels and maximum content of U_{235} data given in the End Use Statements differ slightly from those given in the current appendices to the enrichment agreements. This arises from a recent decision by ESCOM, based on an economic reoptimisation, to make minor changes to the proposed fuel cycle for the two units. A proposal to the Department of Energy for the amendment of the affected appendices is in preparation and will be submitted shortly.

It must be noted that ESCOM has a vital need for early approval of this application to ensure that the planned operating dates for the Koeberg Nuclear Power Station are adhered to.

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INTERNATIONAL
AND
INTERNAL SECURITY

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