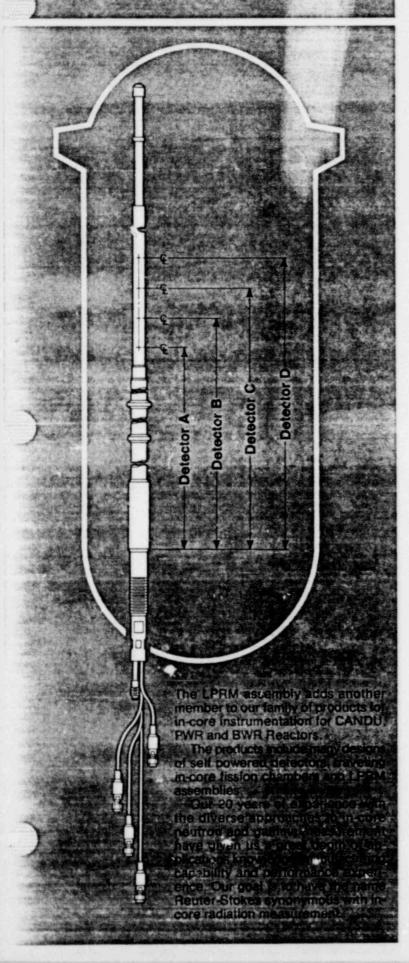
APPROVED BY GAO B-180225(R0362)

APPLICATION FOR LICENSE TO EXPORT NUCLEAR

	MATER	IALA	ND EQUIPMEN	11	(See In	structions on Reverse	407			
I. APPLICANT'S a. DATE		APPLIC	ANT'S REFERENCE			LICENSE NO.		b. DOCK		13
USE 5	13-80		RIS	-	SUPPLU	ER'S NAME AND ADD	RESS	1110	0 20 RIS	63
NAME			nis	(Complete if applicant is not supplier of material)						
	-STOKES, INC.			_		1300 Mar 14 Pa				
STREET ADDRESS 18530	SOUTH MILES PA	RKWAY		a.	NAME	DOD ENT FT TO				
CLEVEL	AND	STATE	ZIP CODE 44128	b.	STREET	ADDRESS	CRT			
. TELEPHONE NUMBER	(Area Code - Number -	Extension	1	c.	CITY	ALL SF	GRDS	STATE	ZIP CODE	
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12 months after order receipt	Same as 5	S	ame as 5			1 year from date of issuar	nce			
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a. NAME GOVERNMENT OF	TNDIA				20.00.000	APUR REACTOR				
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c. CITY-STATE-COU Mohatta Buildi		Bad, I	ombay, ndia 400 001	11	a. EST.	DATE OF FIRST USE				
12. INTERMEDIATE CON		Ris	DEVICE BAS			MEDIATE END USE		100 ST. 11	AVE I	
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1131-1133										-
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22. COUNTRY OF ORIGIN SOURCE MATERIAL	V-	-	OUNTRY OF ORIG HERE ENRICHED			AND RESIDENCE OF THE PARTY OF T	GUARDS (THE L	
USA			USA							
25. ADDITIONAL INFOR							THIS D	Caller	UT OCH	
See attac	ched data shee	t 9.1		30	05	230581	P001	R QUAL	NT CONT	AINS
26. The applicant certifies t	hat this application is p	repared		-			The state of the s			
application is correct to	T 2,2014		0 .			b. TITLE				
27. AUTHORIZED OFFIC	Joseph	D. S	karupa Usopl	0	Skur	ipi si	ales Man	nager		

reuter stokes



RS-C6-1100 Local Power Range Monitor (LPRM) Assembly

For use in your General Electric Company Design BWR

The RS-C6-1100 is Reuter-Stokes' proven LPRM assembly which is electrically and mechanically interchangeable with the General Electric Company design for BWR core instrumentation.

The assembly including fission chambers, calibration tube, plunger, seal plug and gland is to the exact dimensions required for direct replacement in the core support structure of all BWR reactors using standard removal and replacement procedures.

Reuter-Stokes has extensive experience in the design and manufacture of miniature fission chambers of the type used in the LPRM assembly. Features incorporated into the design are based on our experience as well as the need to provide an interchangeable unit. In addition the design has been thoroughly tested in BWR operation.

State of the art welding and ceramic to metal bonding is used throughout the detector manufacture. Particular care has been taken in the design and manufacture of the seal between detector and detector lead cable.

Design of the Reuter-Stokes' LPRM conforms to the ASME Boiler and Pressure Vessel Code. Manufacture and testing is to meet the requirements of Class 1E Safety Related Nuclear Instrumentation. The company is listed as a qualified supplier in the U.S. register of the Coordinating Agency for Supplier Evaluation (CASE) and the USNRC report on License Contractor and Vendor Inspection Status.

Specifications

MECHANICAL

See skerch (on front side) for a brief overall outline of mechanical configuration. Detailed drawings are supplied with each offer and with each shipment.

MATERIAL

	s are in conformance with required codes for in-core safety
related equi	pment. Following are specifications on certain key materials:
Assembly h	ousing
Detector:	Outer shell 304L Stainless steel
	Inner electrode Titanium
Detector co	axial cable:
	Outer sheath 304L Stainless steel
	Center wire 304L Stainless steel
Insulation.	Of detector High purity Aluminum Oxide
	Of detector cable High purity Aluminum Oxide
	Of connector
Neutron ser	nsitive material Uranium>90% enriched in ²³⁵ U

TYPICAL OPERATING CHARACTERISTICS

(Each of four detectors in the assembly).

Thermal neutron sensitivity:

In BWR Spectrum...... 1 x 10-17 amp/nv ±20%

(To 1.5 x 10⁻¹⁷ amp/nv on request)

Thermal neutron flux range 1.4 x 10^{12} to 1.4 x 10^{14} nv Gamma sensitivity 2 x 10^{-14} amp/R/hr $\pm 20\%$

Deviation of neutron signal from

Burn-up life 2.5 years @ 6.7 x 1013 n/cm2 sec-1

in a BWR spectrum

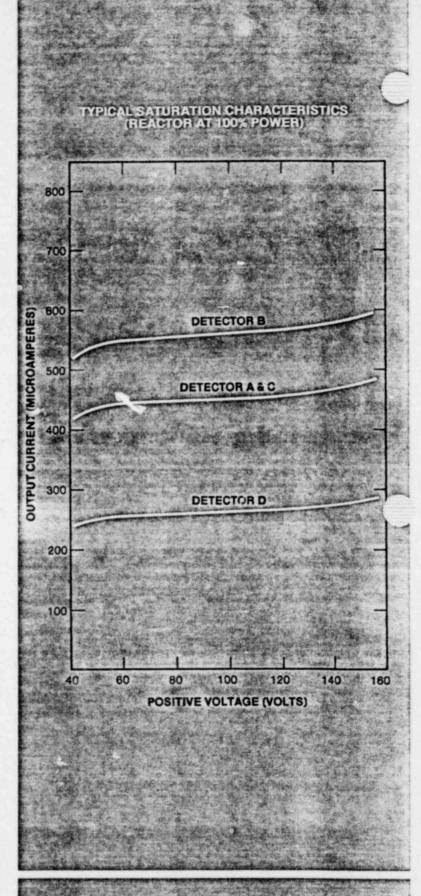
This value corresponds to a sensitivity reduction to 5:1 of

neutron to gamma signal.

Impedance:

MAXIMUM RATINGS

Voltage		. 200V
Design Temperature: (Continuous)		
Design pressure: (External) 1250 ps	ig	(nominal)





18530 South Miles Parkway > Dieveland Ohio 44128 U.S.A. Phone (216) 475 3434