NRC FORM 618 (8-85) 10 CF(17)		CER FOR RA		OF COMP	LIANCE PACKAGES	TOULEAR REGULA	ON COMMISSION
1. & CERTIFICATE NUMBER)	D. REVISION N	UMBER 10	C PACKAGE IDEN	TIFICATION NUMBER	d PAGE NUMBER	e. TOTAL NUMBER PAG
 PREAMBLE This certificate is iss of Federal Regulatio This certificate does applicable regulator 	ued to certify that to ons, Part 71, "Packa not relieve the cor y agencies, includi	e packaging and c ging and Transpor isignor from compi ng the governmen	ontents descrit tation of Radio iance with any t of any countr	bed in 1, am 5 below active Material." requirement of the y through or into y	meets the applicable regulations of the U. which the package wi	salety standards set for S. Department of Trans II be transported.	th in Title 10, Code
3. THIS CERTIFICATE IS ISSI a ISSUED TO (Name and A	UED ON THE BASIS	DF A SAFETY ANALY	SIS REPORT OF	THE PACKAGE DES	IGN OR APPLICATION	ATION:	
General Electric Company Vallecitos Nuclear Center Pleasanton, CA 94566			General Electric Company application dated November 15, 1984, as supplemented.				
4.00000000			C. DOCKET N	UMBER	71-59	039	
This certificate is condi	tional upon fulfillin	g the requirements	of 10 CFR Pa	rt 71, as applicable	and the conditions	specified below.	
5							
(a)	Packaging						
	(1) Mode	No.: GE-	-600			· ·	
	(2) Desc	ription					
•	A st cyli conc of 1 thic cons cask gask doub plac diam from upri 23,3	eel-encased nder 34 ind entric stee ead. The of stainless isting of a body by si et provides le-walled s eter steel the cavity ght position 00 pounds w	d lead sh ches in c el shells cavity is s steel c s steel v ix l-inch s the sea cructure cask ar bolts. v to the on. The when load	hielded shi diameter by s whose ann s 20-1/2 in cylinder. weldment fi n diameter al. A prot e of 1/2-in nd bolted t The cask h outer shel total weig ded.	pping cask. 59.12 inche ular region ches ID by 4 A recessed p lled with le steel bolts ective jacke ch thick can to a steel pa as one 1/2- 1. The cash ht of the pa	The basic c es high forme is filled wi 46 inches hig plug-type cas ead, is secur . A silicone et consisting rbon steel pl allet by eigh inch diameter k is shipped ackage is app	ask body is d by two th 6 inches h, 3/8-inch k lid, ed to the rubber of a ates is t 2-inch drain line in the roximately
	(3) Draw	ings					
	The Elec and	backaging i tric Compar 129D4744, F	is constr ny Drawir Rev. 3.	ructed in a ng Nos.: 1	ccordance w 29D4742, Rev	ith the follo v. 2; 129D474	wing Genera 3, Rev. 1;
	Lift packa	ing and/or age must be	tie-dowr e in acco	n devices w ordance wit	hich are a s h the above	structural pa drawings.	rt of the
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CONDITIONS (continued)

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(Continued) 5.

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- (b) Contents
 - (1) Type and form of material

Byproduct material and irradiated special nuclear material in solid or solid oxide form, but specifically not loose powders. Contents are to be clad, encapsulated or contained in a metal encasement of such material as to withstand the combined effects of the internal heat load and the 14751F fire with the closure pre-tested for leak tightness. Also, byproduct material and irradiated special nuclear material meeting the requirements of special form radioactive material.

(2) Maximum quantity of material per package

Plutonium in excess of twenty (20) curies per package must be in the form of metal, metal alloy or reactor fuel elements, and

- (i) For the contents described in 5.(b)(1) the maximum decay heat not to exceed 600 watts and the fissile content not to exceed 500 grams of U-235, 300 grams U-233, 300 grams Pu, or a prorated quantity of each such that the sum of the ratios does not exceed unity. When the contents of this paragraph are in the form of irradiated reactor fuel, the fuel must have been cooled for a minimum of 90 days, and no more than 10,000 ci of noble gases must be available for release from the fuel rod plenums. The cask must be leak tight to 1×10^{-3} atm-cm³/sec under normal conditions of transport; or
- (ii) For the contents described in 5.(b)(1) the maximum decay heat not to exceed 600 watts and the fissile content not to exceed 1200 grams fissile provided: (1) the fissile material is contained in standard waste liners constructed of 5-inch Schedule 40 pipe with a maximum inside length of 39-5/16 inches, (2) no more than four such liners are shipped at one time, (3) each liner contains no more than 300 grams fissile, and (4) the cask is provided with a positioning lattice to maintain separation between the liners.

(c)	Fiss	ile Class	II and III			
	(1)	Minimum transport index to be shown on label for Class II	For the contents specified in 5(b)(1) and limited in 5(b)(2)(i).			
			8.4			
	(2)	Maximum number of packages per shipment for Class III	For the contents specified in 5(b)(1) and limited in 5(b)(2)(ii).			

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CONDITIONS (continued)

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6. The U-235 equivalent mass must be determined by the following method:

U-235 equivalent mass equals U-235 mass plus 1.66 times U-233 mass plus 1.66 times Pu mass.

- 7. Package contents must be dry and the fissile material unmoderated (H to X atomic ratio less than 2).
- The cask must be delivered to a carrier dry and the cavity drain line must be closed with a plug which will maintain its seal at temperatures up to at least 620°F.
- 9. Prior to each shipment, the silicone rubber lid gasket(s) must be inspected. This gasket(s) must be replaced if inspection shows any defects or every 12 months, whichever occurs first. Cavity drain line must be sealed with appropriate sealant applied to threads of pipe plug.
- 10. Fabrication of additional packaging is not authorized.
- 11. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12.
- 13. Expiration date: March 31, 1990.

REFERENCES

General Electric Company's application dated November 15, 1984.

Supplements dated: February 25 and March 8, 1985; and September 29, 1987.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief Transportation Branch Division of Safeguards and Transportation, NMSS

Date: OCT 2 8 1987



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

OCT 2 8 1987

Transportation Eranch Approval Record Model No. GE-600 Package Docket No. 71-5980 Revision No. 10

By application dated September 29, 1987, General Electric Company requested the certificate of compliance be amended to incorporate the latest revision level of the packaging drawing. Drawing No. 129D4744, Rev. 3, has been revised to show the corrective action taken to isolate the tapped holes for the lift lugs from the annulus formed by the outer cask wall and the lift lug backing ring. The corrective action is being taken in response to an operating problem which developed on a similar package (Certificate of Compliance No. 9081). It was observed that a fluid had leaked from two of the lifting lug bolt holes located on the side of the cask.

To isolate the tapped holes from the annulus formed by the lifting lug backing ring, each tapped hole will be drilled and tapped to a larger diameter and fitted with a threaded insert. The insert is seal welded to the lift lug adapter plate.

The staff considers the proposed corrective action to be a satisfactory resolution to the problem of restricting the entry of fluid into the annulus formed by the lift lug backing ring. The modification of the bolt holes has no adverse effect on the ability of the package to meet the requirements of 10 CFR Part 71.

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Charles E. MacDonald Transportation Branch Division of Safeguards and Transportation, NMSS

Date OCT 2 8 1997