NRC FORM 618 (8-2000) 10 CFR 71				U.S. NUCLEAR REGULATORY COMMISSION
CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES				
1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE / PAGES
4986	40	71-4986	USA/4986/AF	1 OF 4

2. PREAMBLE

a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."

b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

a. ISSUED TO *(Name and Address)*

Global Nuclear Fuel - Americas, L.L.C.
P.O. Box 780
Wilmington, NC 28402

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

General Electric Company application dated September 10, 1997, as supplemented.

4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

(a) Packaging

(1) Model No.: RA-3

(2) Description

A fuel assembly and fuel rod shipping container. Packagings are right rectangular boxes consisting of an outer container of wooden construction and a metal inner container separated by cushioning material.

The metal inner container is approximately 11 inches by 18 inches by 178 inches long and is positioned within a wooden outer container approximately 30 inches by 30 inches by 207 inches long. Cushioning is provided between the inner and outer containers by phenolic impregnated honeycomb and ethafoam. Closure is accomplished by bolts. A pressure relief (breather) valve is provided on the inner container, and is set for 0.5 psi differential. The total weight of the packaging and contents is 2,800 pounds.

(3) Drawings

The packaging is constructed in accordance with the following General Electric Company Drawing Nos.:

769E229, Revision 9
769E231, Revision 8

5.(a) Packaging (Continued)

(4) Product Container

The fuel rod product container is constructed in accordance with General Electric Company Drawing No.:

0028B98, Revision 0

5.(b) Contents

(1) Type and form of material

(i) Unirradiated UO_2 fuel assemblies. Each fuel assembly is made up of either 60 or 62 rods in an 8 x 8 square array with maximum fuel cross-sectional area of 25 square inches and a maximum fuel length of 150 inches. The maximum U-235 enrichment is 5.0 percent by weight, and the maximum average enrichment is 5.0 percent by weight. The maximum pellet diameter, minimum clad thickness, water rod specifications, and poison rod specifications are in accordance with Section 6.1, Appendix 8-H, of the supplements dated June 27 and November 1, 1995.

(ii) Unirradiated UO_2 fuel assemblies. Each fuel assembly is made up of 74 full and partial length rods in a 9 x 9 square array with maximum fuel cross-sectional area of 25 square inches and a maximum fuel length of 150 inches. The maximum U-235 enrichment is 5.0 percent by weight, and the maximum average enrichment is 4.6 percent by weight. The maximum pellet diameter, minimum clad thickness, water rod specifications, and poison rod specifications are in accordance with Section 6.1, Appendix 8-I, of the supplements dated June 27 and November 1, 1995.

(iii) Unirradiated UO_2 fuel assemblies. Each fuel assembly is made up of 92 full and partial length rods in a 10 x 10 square array with maximum fuel cross-sectional area of 25 square inches and a maximum fuel length of 150 inches. The maximum U-235 enrichment is 5.5 percent by weight, and the maximum average enrichment is 5.0 percent by weight. The maximum pellet diameter, minimum clad thickness, water rod specifications, and poison rod specifications are in accordance with Section 6.1, Appendix 8-J, of the supplements dated June 27 and November 1, 1995.

(iv) Unirradiated UO_2 fuel assemblies. Each fuel assembly is made up of 92 full and partial length rods in a 10 x 10 square array with maximum fuel cross-sectional area of 25 square inches and a maximum fuel length of 150 inches. The maximum U-235 enrichment is 5.0 percent by weight, and the maximum average enrichment is 4.7 percent by weight. The maximum pellet diameter, minimum clad thickness, water rod specifications, and poison rod specifications are in accordance with Section 5.1 and Table 5.1 contained in Appendix 8-J(a) of the supplement dated May 10, 2005.

5.(b) Contents (Continued)

(v) Unirradiated UO_2 fuel rods, which are contained within the product container specified in 5(a)(4). The maximum U-235 enrichment is 5.0 percent by weight. The fuel rods are clad with zircaloy, incaloy, inconel, or stainless steel. The minimum pellet diameter is 0.340 inch, and the maximum pellet diameter is 0.515 inch.

(vi) Unirradiated UO_2 fuel rods, which may be loose or may be strapped together. The maximum U-235 enrichment is 5.0 percent by weight. The fuel rods are clad with zircaloy, incaloy, inconel, or stainless steel. The minimum pellet diameter is 0.340 inch, and the maximum pellet diameter is 0.515 inch.

(2) Maximum quantity of material per package

(i) For the contents described in 5(b)(1)(i), 5(b)(1)(ii), 5(b)(1)(iii), and 5(b)(1)(iv):

Two (2) fuel assemblies. Total quantity of radioactive material within a package may not exceed a Type A quantity.

(ii) For the contents described in 5(b)(1)(v):

Two (2) fuel bundles. A fuel bundle is defined as any number of fuel rods contained within the product container specified in 5(a)(4).

(iii) For the contents described in 5(b)(1)(vi):

Two (2) fuel bundles. A fuel bundle is defined as a maximum of 14 fuel rods positioned within one side (channel) of the inner container.

(c) Criticality Safety Index

For the contents described in 5(b)(1)(i), 5(b)(1)(ii) and 5(b)(1)(iii), and limited in 5(b)(2)(i):	0.4
For the contents described in 5(b)(1)(iv), and limited in 5(b)(2)(i):	0.8
For the contents described in 5(b)(1)(v), and limited in 5(b)(2)(ii):	6.3
For the contents described in 5(b)(1)(vi), and limited in 5(b)(2)(iii):	2.9

6. Each fuel assembly must be unsheathed or must be enclosed in an unsealed, polyethylene sheath which may not extend beyond the ends of the fuel assembly. The ends of the sheath may not be folded or taped in any manner that would prevent the flow of liquids into or out of the sheathed fuel assembly.

7. Polyethylene holders with a maximum effective thickness of 0.151 inches (0.3835 cm) may be placed surrounding the fuel assembly up to a maximum of 0.13 grams H_2O hydrogen equivalent per cubic centimeter averaged over the assembly. The effective holder thickness is the linear average of the maximum and minimum thickness.

8. Polyethylene shipping shims may be inserted between rods within the fuel assemblies up to a maximum of 0.10 grams H_2O hydrogen equivalent per cubic centimeter averaged over the assembly. The shipping shims may be used with or without the polyethylene holders.

9. For shipment of fuel rods described in 5(b)(1)(v) and 5(b)(1)(vi), each fuel rod may be contained within a polyethylene sheath with a maximum thickness of 0.01 inch. Dunnage is permitted within the product container, and within the inner container, provided that the dunnage does not have a hydrogen density greater than that of water.

10. Maximum average enrichment means the highest enrichment averaged over any axial zone of the assembly.

11. In addition to the requirements of Subpart G of 10 CFR Part 71, each packaging must meet the Acceptance Tests and Maintenance Program of Chapter 6 of the application, and the package must be prepared for shipment and operated in accordance with the Operating Procedures of Chapter 6 of the application.

12. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.17.

13. Expiration date: March 31, 2008.

REFERENCES

General Electric Company application dated September 10, 1997.

Supplements dated: November 20, 1997; June 5 and 25, July 1 and 21, and August 14, 1998; October 14, 1999; December 19, 2002; January 21, and December 3, 2004; and April 18 and May 10, 2005.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Robert Lewis, Chief
Licensing Section
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Date:_____