Form NRC-618
(12-73)
10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

1.(a) Certificate Number	1.(b) Revision No.	1.(c) Package Identification No.	1.(d) Pages No.	1.(e) Total No. Pages
5768	4	USA/5768/AF	1	4

2. PREAMBLE

2.(a) This certificate is issued to satisfy Sections 173.393a, 173.394, 173.395, and 173.396 of the Department of Transportation Hazardous Materials Regulations (49 CFR 170-189 and 14 CFR 103) and Sections 146-19-10a and 146-19-100 of the Department of Transportation Dangerous Cargoes Regulations (46 CFR 146-149), as amended.

2.(b) The packaging and contents described in item 5 below, meets the safety standards set forth in Subpart C of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Materials for Transport and Transportation of Radioactive Material Under Certain Conditions."

2.(c) 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—

3.(a) Prepared by *(Name and address)*:

General Electric Company
P.O. Box 780
Wilmington, NC 28401

3.(b) Title and identification of report or application:

Combustion Engineering, Inc. application dated September 11, 1972, as supplemented.

3.(c) Docket No. 71-5768

4. CONDITIONS

This certificate is conditional upon the fulfilling of the requirements of Subpart D of 10 CFR 71, as applicable, and the conditions specified in item 5 below.

5. Description of Packaging and Authorized Contents, Model Number, Fissile Class, Other Conditions, and References:

(a) Packaging

(1) Model No.: BB-250-2

(2) Description

Inner container is 11.5" ID, 16-gage steel cylinder, 63.5" long, with bolted and gasketed top flange closure and seal welded bottom plate. Inner container is centered and supported in a 22.5" ID by minimum 74" long 16-gage steel drum by 1/4" diameter spring steel rods and vermiculite. Maximum weight of packaging and contents is approximately 575 pounds.

(3) Drawings

The BB-250-2 packaging is constructed in accordance with Westinghouse Electric Corporation sketch SKA-252-1 (Appendix L to Westinghouse Electric Corporation letter dated March 1, 1968). The outer cover is secured by either a 12-gage closure ring or six (6), 1/2" diameter bolts.

(b) Contents

(1) Type and form of material

(i) Uranium oxide pellets. Uranium may be enriched to a maximum 3.5 w/o in the U-235 isotope. The maximum H/U atomic ratio, considering all sources of hydrogenous material within the inner container shall not exceed 1.5.

(ii) Uranium oxide enriched to a maximum 3.5 w/o in the U-235 isotope. Chemically-bound or physically-bound water in mixtures is permitted. Slips or slurries that exhibit a visually discernible liquid second phase are prohibited.

(iii) Bulk uranium oxide (UO_2 or U_3O_8) powder with a maximum density of 2 g U/cc and enriched to a maximum 4 w/o in the U-235 isotope. The maximum H/U atomic ratio, considering all sources of hydrogenous material within the inner container shall not exceed 1.13.

(iv) Uranium compounds which will not decompose at temperatures up to 750¼F. Uranium may be enriched to a maximum 5 w/o in the U-235 isotope. The maximum H/U atomic ratio, considering all sources of hydrogenous material within the inner container shall not exceed 1.5.

(v) Uranium oxide pellets, enriched to a maximum of 3.5 w/o in the U-235 isotope. The maximum H/U atomic ratio, considering all sources of hydrogenous material within the inner container, shall not exceed 3.0.

(2) Maximum quantity of material per package

(i) For the contents described in 5(b)(1)(i):

Total contents not to exceed 250 pounds, with the U-235 content not to exceed 1.96 kilograms. The pellets shall be contained within sealed 9.5" to 9.75" diameter steel cans.

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

Total contents not to exceed 250 pounds, with the U-235 content not to exceed 2.95 kg. The contents shall be contained within two (2), 9.75 inch diameter by 12 inch high sealed stainless steel cans. Empty stainless steel cans will be used to make up the remaining space within the inner containers.

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

Total contents not to exceed 250 pounds, with the U-235 content not to exceed 2.95 kg. The contents shall be contained within three (3), 9.75 inch diameter by 12 inch high sealed stainless steel cans. Empty stainless steel cans will be used to make up the remaining space within the inner container.

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

Total contents not to exceed 250 pounds, with the U-235 content not to exceed four (4) kilograms.

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

Total contents not to exceed 250 pounds, with the U-235 content not to exceed five (5) kilograms. Four (4) steel drums containing not more than 1.3 kilograms U-235 each shall be packaged in the shipping insert within the inner container as shown in Westinghouse Electric Corporation Sketch SKA-252-1 and Drawing C7108D10. The steel drums shall be constructed in accordance with US Military Standard MS 24347 with a maximum ID of 8.5" and a nominal height of 15.4".

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

Total contents not to exceed 250 pounds, with the U-235 content not to exceed 3.5 kilograms. The contents shall be transported in the inner container shown in Nuclear Materials and Equipment Corporation Drawing No. 10-F-676, Revision 2. The inner container shown in Westinghouse Electric Corporation sketch SKA-252-1 shall be secured with twelve (12), 1/2" diameter bolts.

(c) Fissile Class — II and III

(1) Minimum transport index to be shown on label for Fissile Class II.

(i) For the contents described in 5(b)(1)(i), 5(b)(1)(iii), 5(b)(1)(iv): 0.5

(ii) For the contents described in 5(b)(1)(ii) and limited in 5(b)(2)(ii): 2.0

(iii) For the contents described in 5(b)(1)(ii) and limited in 5(b)(2)(iii): 8.3

(iv) For the contents described in 5(b)(1)(v): 0.7

(2) Maximum number of packages per shipment for Fissile Class III

(i) For the contents described in 5(b)(1)(i), 5(b)(1)(iii), and 5(b)(1)(iv): 200

(ii) For the contents described in 5(b)(1)(ii) and limited in 5(b)(2)(ii): 59

(iii) For the contents described in 5(b)(1)(ii) and limited in 5(b)(2)(iii): 14

6. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).

7. Expiration date: October 31, 1980.

REFERENCES

Combustion Engineering, Inc. application dated September 11, 1972.

Supplements dated: December 19, 1973 and March 8, 1974.

Westinghouse Electric Corporation letter dated July 13, 1973.

General Electric Company letter dated March 30, 1973.

The Babcock & Wilcox Company letter dated February 16, 1977.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief
Transportation Certification Branch
Division of Fuel Cycle and
Material Safety

Date: JUL 10 1980