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
5086		USA/5086/AF	

2. PREAMBLE

- 2.(a) This certificate is issued to satisfy Sections 173.393, 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 pertificate is issued on the basis of a safety analysis report of the package design or application-
- 3.(a) Prepared by (Name and address): United Nuclear Corporation 67 Sandy Desert Rd. Uncasville, CT 06382

3.(b) Title and identification of report or application:
United Nuclear Corporation application dated
January 3, 1967, as supplemented.

3.(c) Docket No. 71-5086

4. CONDITIONS

This certificate is conditional upon the fulfilling of the requirements of Subpart C 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 : UNC-2600
 - (2) Description

The inner container is an 11-gage steel box 96" long with a 25 square inch maximum cross section. The inner container is supported in a 22 1/2" ID by 101" long 14-gage steel drum by an insertable cage formed by nine 21 1/2" diameter by 3/8" thick steel plates spaced approximately 12" apart, with a channel formed through the center of the plates by angle iron. The outer container closure is made with a 14-gage or heavier drum lid with bolt locking ring utilizing not less than 5/8 inch diameter steel bolt or lock nut.

(3) Drawings

The packaging is constructed in accordance with United Nuclear Corporation Drawings E-20354, Sheets 1 through 5. Outer container closure shall be made in accordance with the United Nuclear Corporation application dated January 3, 1967.

1636 294

5. (b) Contents

- (1) Type and form of material
 - (i) Dry uranium-zirconium, uranium-aluminum alloys and compounds with densities not exceeding 1 kg U-235 per liter in the form of plates or sheets. Uranium may be enriched to any degree in the U-235 isotope.
 - (ii) Dry uranium oxide pellets encapsulated in stainless steel, aluminum or zircaloy rods. Uranium may be enriched to a maximum 5.0 w/o in the U-235 isotope.
- (2) Maximum quantity of material per package

Ten (10) kilograms U-235 and the net weight of the contents not to exceed 308 pounds.

(c) Fissile Class

II and III

(1) Minimum transport index to be shown on label for Class II 10.0

(2) Maximum number of packages per shipment for Class III Ten (10)

- 6. The cross section of the inner container shall be limited to a maximum 19.6 square inches for the contents specified in 5(b)(i)(i) where the ratio of the weight of U-235 to the weight of U-235 plus zirconium exceeds 0.074 or the ratio of the weight of U-235 to the weight of U-235 plus aluminum exceeds 0.22.
- 7. The package authorized by this certificate is hereby approved for use under the general license provisions of Paragraph 71.12(b) of 10 CFR Part 71.
- 8. Expiration date: October 31, 1981.

REFERENCES

United Nuclear Corporation application dated January 3, 1967.

Supplements dated: January 24, 1967; and June 14, September 11, and December 4, 1968.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief

Transportation Certification Branch

Division of Fuel Cycle and

Material Safety

DEC 1 0 1979