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
5894	2	USA/5894/AF	1	3

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)*:
U.S. Department of Energy
Division of Naval Reactors
Washington, D.C. 20545

3.(b) Title and identification of report or application:
Safety Analysis Report for 2.7 New Fuel Shipping Container dated July 15, 1968, as supplemented.

3.(c) Docket No. 71-5894

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.: 2.7 New Fuel

(2) Description

The Model 2.7 New Fuel container was designed to ship and store new and unirradiated S5W Core R2 fuel modules. Adapters are used to permit additional shipments of S5W Core R3, A1W Core R2, and S1C Type I fuel modules. The container assembly consists of two major components, an inner container which holds the fuel module and an outer container which supports the inner container. The steel outer container is approximately 24.5 inches wide by 24.5 inches high and 128 inches long. The cross section of the outer container is octagonal, the steel shell thickness is 0.1875 inch, ASTM-A283 Gr. B. The outer shell is surrounded by a framework of steel stiffeners and rails. The inner container is constructed from Type 304 CRES plates, 0.1875 inch thick and is 7.76 inches square and 99 inches long. Bolted closure is provided for each container. The gross weight of the package ranges from approximately 1500 to 2000 pounds.

(3) Drawings

The packaging is constructed in accordance with Westinghouse Electric Corporation Drawing No. 924J152, Rev. 16.

(b) Contents

(1) Type and form of material

Unirradiated fuel assemblies of the following type:

(i) S5W Core R2 standard module or corner module;

(ii) S5W Core R3 standard module or corner module;

(iii) A1W Core R2 standard cluster or half cluster;

(iv) S1C Core Type I standard cluster;

(v) S1C Core Type I fuel subassembly;

(vi) S5W Core 2 standard module or corner module;

(vii) A1W Core R2 subassembly.

(2) Maximum quantity of material per package

(i) One fuel assembly as described in 5(b)(1)(i), 5(b)(1)(ii), 5(b)(1)(iii), 5(b)(1)(iv) or 5(b)(1)(vi).

(ii) Two fuel assemblies as described in 5(b)(1)(v).

(iii) Four fuel assemblies as described in 5(b)(1)(vii).

(c) Fissile Class — III

Maximum number of packages per shipment:

(1) For the contents described in 5(b)(1)(i), 5(b)(1)(ii), 5(b)(1)(iv), 5(b)(1)(v), and 5(b)(1)(vi) and limited in 5(b)(2)(i) and 5(b)(2)(ii):	No more than one total core's worth
(2) For the contents described in 5(b)(1)(iii) and 5(b)(1)(vii) and limited in 5(b)(2)(i) and 5(b)(2)(iii):	25 total, with the number of packages as described in 5(b)(1)(vii) and limited in 5(b)(2)(iii) not to exceed four

6. Expiration date: January 31, 1988

REFERENCES

Safety Analysis Report for 2.7 New Fuel Shipping Container, WAPD-OP(R)S-2650 dated July 15, 1968.

Supplements: Bettis Atomic Power Laboratory letters WAPD-OP(R)S-2800 dated September 3, 1968 and WAPD-OP(R)S-3425 dated August 14, 1969, and Department of Energy letter G# 6291 dated July 13, 1979.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

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

Date: JAN 06 1983

U.S. Nuclear Regulatory Commission
Transportation Certification Branch
Approval Record
Model No. 2.7 New Fuel Packaging
Docket No. 71-5804

By application dated July 27, 1982, U.S. Department of Energy requested renewal of Certificate of Compliance No. 5894. No changes have been authorized to the package design since approval of latest supplement dated July 13, 1979.

The staff concludes that the statements of the original application, as supplemented, satisfies the requirement for renewal of the Certificate of Compliance.

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

Date: JAN 06 1983