0700036

Distribution: w/encls
Docket File
NRC PDR
IE HQ
Regions (5)
State Health Official
CEWilliams
RHOdegaarden
GJackson
NMSS R/F
FCTC R/F

Rev 3

release

FCTC:CEW
71-6294

AUG 19 1985

Combustion Engineering, Inc.
ATTN: Mr. H. E. Eskridge
P.O. Box 107
Hematite, MO 63047

Gentlemen:

As requested by Babcock & Wilcox Company letter dated June 4, 1985, and Combustion Engineering, Inc. letter dated July 1, 1985, enclosed is Certificate of Compliance No. 6294, Revision No. 9, for the Model No. UNC-2901 packaging. This certificate supersedes, in its entirety, Certificate of Compliance No. 6294, Revision No. 8, dated October 24, 1984.

Changes made to the enclosed certificate are indicated by vertical lines in the margin.

Those on attached list have been registered as users of this package under the general license provisions of 10 CFR §71.12 or 49 CFR §173.471.

This approval constitutes authority to use this package for shipment of radioactive material and for the package to be shipped in accordance with the provisions of 49 CFR §173.471.

Sincerely,

Original Signed by
CHARLES E. MACDONALD

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

Enclosures:
1. Certificate of Compliance No. 6294, Rev. 9
2. Approval Record

cc w/encls:
Mr. Richard R. Rawl
Department of Transportation

H-38

	FCTC	FCTC	
OFFICE>	CEWilliams:alm	RHOdegaarden	CEMacDonald
DATE>	08/16/85	08/16/85	08/19/85

OFFICIAL RECORD COPY

Model No. UNC-2901 Package
USA/6294/AF

Addressees: w/encls

Ltr dtd: AUG 1 9 1985

Babcock & Wilcox Company
ATTN: Mr. D. W. Zeff
P.O. Box 300
Lynchburg, VA 24505

Combustion Engineering, Inc.
ATTN: Mr. H. E. Eskridge
P.O. Box 107
Hematite, MO 63047

General Electric Company
ATTN: Mr. Charles M. Vaughan
P.O. Box 780
Wilmington, NC 28402

United Nuclear Corporation
ATTN: Mr. William F. Kirk
67 Sandy Desert Road
Uncasville, CT 06382

FICE ▶							
NAME ▶							
DATE ▶							

NRC FORM 618
(6-83)
10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIALS PACKAGES

1.a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. PACKAGE IDENTIFICATION NUMBER	d. PAGE NUMBER	e. TOTAL NUMBER PAGES
6294	9	USA/6294/AF	1	3

2 PREAMBLE

a. This certificate is issued to certify that the 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 of Radioactive Materials for Transport and Transportation of Radioactive Material Under Certain Conditions."

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. PREPARED BY *(Name and Address)*:

Combustion Engineering, Inc.
P.O. Box 107
Hematite, MO 63047

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION:

Combustion Engineering, Inc. application dated June 20, 1980, as supplemented.

c. DOCKET NUMBER 71-6294

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.: UNC-2901

(2) Description

A maximum 10.80-inch square by 30-inch long inner container constructed of minimum 14-gauge steel, with bolted and gasketed top flange closure and sealed welded bottom sheet. Inner container is centered and supported in a 22.5-inch ID by 34-inch high 18-gauge steel drum with 16-gauge head and DOT Specification 17H closure by asbestos sheet, plywood, hardboard, and insulating material. Gross weight of package - 660 pounds.

(3) Drawings

The packaging is constructed in accordance with Combustion Engineering, Inc. Drawing No. D-5007-8086, Rev. 3; or Babcock & Wilcox Company Drawing Nos. MS-135E, Rev. 3 and MS-82B, Rev. 0.

(b) Contents

(1) Type and form of material

Uranium dioxide as powder or sintered pellets. Uranium may be enriched to a maximum 4.1 w/o in the U-235 isotope. The maximum H/U atomic ratio, considering all sources of hydrogenous material within the inner container for powder or within the boundary of the pellet array for pellet packages, shall not exceed 4.5.

For the uranium contents specified in 5(b)(2)(iii), the maximum H/U considering all sources of hydrogenous material within the pellet box must not exceed 1.3 under normal conditions of transport.

For the uranium contents specified in 5(b)(2)(iv), the maximum weight of plastic bags containing UO_2 shall not exceed 600 grams per shipping container.

(2) Maximum quantity of material per package

(i) 427 pounds containing not more than 4.79 kgs U-235 as sintered pellets enriched to a maximum 3.75 w/o in the U-235 isotope, or 3.93 kgs U-235 as sintered pellets enriched to a maximum 4.1 w/o in the U-235 isotope. Pellets shall be packaged in accordance with Combustion Engineering, Inc. Drawing No. D-5008-8192, Rev. 5, or NFM-E-4266, Rev. 0.

(ii) 230 pounds containing not more than 3.60 kgs U-235 as powder or sintered pellets packaged in accordance with United Nuclear Corporation Drawing No. A-5007-2011.

(iii) 370 pounds containing not more than 6 kgs U-235 as sintered pellets enriched to a maximum of 4.1 w/o in the U-235 isotope. Pellets must be packaged in accordance with Babcock & Wilcox Drawing Nos. MS-157C, Rev. 3, and MS-84D, Rev. 2.

(iv) Uranium dioxide as powder, pellets, or any combination thereof. Uranium may be enriched to a maximum 4.1 w/o in the U-235 isotope. Uranium must be packaged in accordance with Babcock & Wilcox Drawing Nos. MS-157C, Rev. 4, and MS-84D, Rev. 4.

(c) Fissile Class — II and III

For the contents specified in 5(b)(2)(i) and (ii):

(1) Minimum transport index to be shown on label for Class II — 2.0

(2) Maximum number of packages per shipment for Class III — 50

For the contents specified in 5(b)(2)(iii):

(1) Minimum transport index to be shown on label for Class II — 0.5

(2) Maximum number of packages per shipment for Class III — 150

For the contents specified in 5(b)(2)(iv):

(1) Minimum transport index to be shown on label for Class II — 1.0

(2) Maximum number of packages per shipment for Class III — 50

6. Prior to each shipment the insert (containment vessel) gasket shall be inspected. This gasket shall be replaced if inspection shows any defects or every twelve (12) months, whichever occurs first.

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

8. Expiration date: August 31, 1990

REFERENCES

Combustion Engineering, Inc., application dated June 20, 1980.

Supplement dated: September 9, 1981.

Babcock & Wilcox Company letter dated June 4, 1985.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

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

Date: AUG 1 9 1985

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

Transportation Certification Branch
Approval Record
Model No. UNC-2901 Package
Docket No. 71-6294

By application dated July 1, 1985, Combustion Engineering, Inc. requested renewal of Certificate of Compliance No. 6294. No changes have been requested or made to the package by Combustion Engineering, Inc. since approval of the latest Combustion Engineering supplement dated September 9, 1981.

By letter dated June 4, 1985, Babcock & Wilcox submitted a consolidation of the supplements and their letter of December 17, 1982. This submittal pertained to those amendments to the certificate requested by Babcock & Wilcox and subsequently authorized by the Nuclear Regulatory Commission. A review of the Babcock & Wilcox consolidation confirmed that all pertinent supplement information and the information contained in the letter of December 17, 1982, has been incorporated into the letter dated June 4, 1985.

The staff concludes that the statements of the Combustion Engineering application dated June 20, 1980, as supplemented September 9, 1981, and subsequently supplemented by Babcock & Wilcox, satisfy 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 AUG 1 9 1985