

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
6441	5	USA/6441/B( )F	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 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)

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

U.S. Department of Energy  
Division of Naval Reactors  
Washington, DC 20585

Safety Analysis Report for D2G Power Unit  
Shipping Container dated August 4, 1969,  
as supplemented.

c. DOCKET NUMBER

71-6441

## 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.: D2G Power Unit

(2) Description

The D2G Power Unit shipping container assembly consists of five main assemblies; (1) the barrel assembly, (2) the upper cover, (3) the lower cover, (4) the main shipping skid, and (5) the barrel trunnion supports. To prepare the power unit shipping container for shipment of a power unit, the container barrel is rotated to the vertical position, the upper cover is removed and the power unit is loaded into the barrel and secured in the container with eight (8) shipping studs. The upper cover is then installed and the container is rotated to the horizontal position for shipment. The container assembly is 31 feet long and 8-1/2 feet wide and it is attached to a government owned permanently assigned depressed center railroad car; the maximum height above the rails is 13 feet, 10 inches in the shipping configuration. The power unit is shipped complete with design control rods and mechanisms installed.

5.(a)(2) Description (continued)

The closure head in a Type A and Type B power unit contains an integral bolting flange. This type of power unit is retained in the container by means of eight shipping bolts which clamp the power unit to the barrel upper flange of the shipping container. The control rods in a Type A or B power unit are restrained in the power unit by means of control rod hold-down latch pawls located in the upper control rod drive mechanism. The Type C, D, or E power unit is also retained in the container by means of eight shipping bolts but because the closure heads on these power units do not include a bolting flange, a special shipping ring is used to clamp the closure head and core cartridge assembly to the barrel upper flange of the shipping container. The control rods in a Type C, D, or E power unit are restrained in the power unit by means of rebound and outmotion latches located in the latching portion of the control rod drive mechanisms. The container assembly weighs about 100,000 pounds empty and about 270,000 pounds loaded.

(3) Drawings

The packaging is constructed in accordance with Baldwin-Lima-Hamilton Corporation Drawing Nos. R-126361, Rev. E, and R-126347, Rev. K, and Westinghouse Electric Corporation Drawing Nos. 955F632, Rev. 5, and 972D940, Rev. 5.

(b) Contents

(1) Type and form of material

Unirradiated enriched uranium as contained in Naval Reactors Type A, B, C, D, or E power units consisting of core barrel, unirradiated fuel assemblies, closure head, mechanisms and associated hardware, with all design control rods and mechanisms installed.

(2) Maximum quantity of material per package

One power unit as described in 5(b)(1).

(c) Fissile Class

III

Maximum number of packages per shipment

one (1)

6. Expiration date: December 31, 1997.

CONDITIONS (continued)

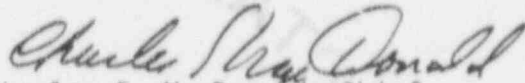
Page 3 - Certificate No. 6441 - Revision No. 5 - Docket No. 71-6441

REFERENCES

Safety Analysis Report for D2G Power Unit Shipping Container, ONP-74252-13 dated August 4, 1969.

Supplements: Bettis Atomic Power Laboratory letters WAPD-DP(CH)-1252, dated November 30, 1973; WAPD-DP(CH)-1466, dated October 18, 1974; Knolls Atomic Power Laboratory letter CGN 85542-250, dated February 5, 1981; and Naval Reactors letter NR:RR:ESSNIDER G#92-03731, dated October 7, 1992.

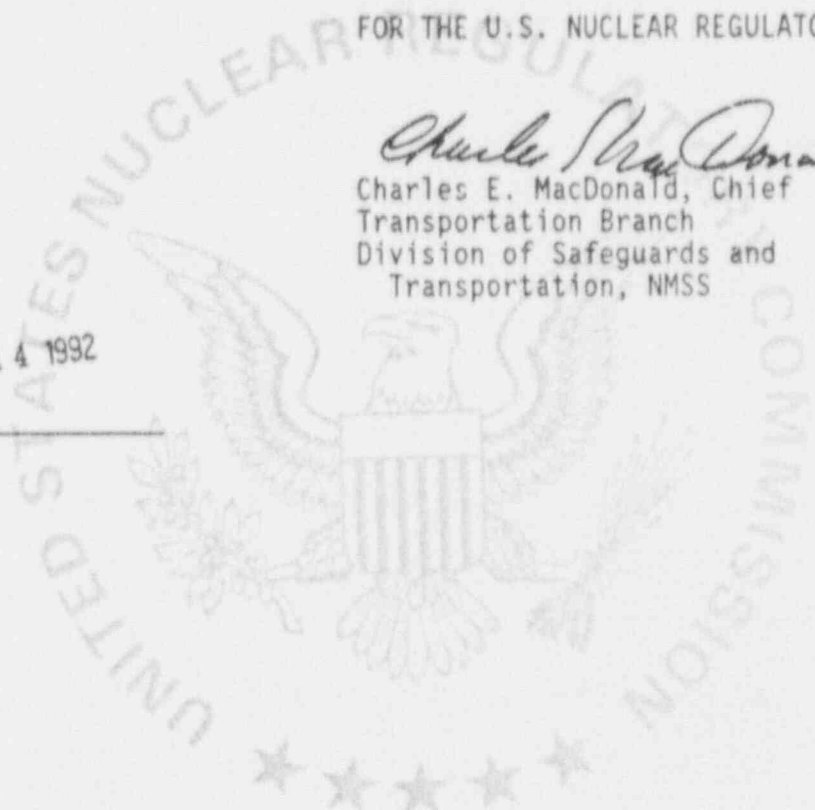
FOR THE U.S. NUCLEAR REGULATORY COMMISSION



Charles E. MacDonald, Chief  
Transportation Branch  
Division of Safeguards and  
Transportation, NMSS

DEC 14 1992

Date: \_\_\_\_\_





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

APPROVAL RECORD  
Model No. D2G Power Unit Shipping Package  
Certificate of Compliance No. 6441  
Revision No. 5

By application dated October 7, 1992, Department of Energy, Division of Naval Reactors, requested renewal of Certificate of Compliance No. 6441, for the Model No. D2G Power Unit Shipping Package. In addition, NR requested that the package identification number be changed to indicate that the package contains a type B quantity of radioactive material. No changes have been made to the package design or the authorized contents. NR stated that there had been no operational experience which would preclude continued certification of the package.

The package identification number was changed from USA/6441/AF to U/A/6441/B( )F, since the package contains a type B quantity of radioactive material. The package meets the containment requirements of a type B package since the fuel cladding provides containment under normal and accident conditions.

The Certificate of Compliance has been renewed for a five year period which expires December 31, 1997.

A handwritten signature in cursive script, reading "Charles E. MacDonald", is positioned above the printed name.

Charles E. MacDonald, Chief  
Transportation Branch  
Division of Safeguards and  
Transportation, NMSS

DEC 14 1992

Date \_\_\_\_\_