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.	1.1c) Package Identification No.	1.(d) Pages No. 1.(e) Total No. Pages
6089	2	USA/6089/AF	

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 Atomic Company P. O. Box 81608 San Diego, CA 92136 3.(b) Title and identification of report or application:

Gulf General Atomic, Inc., application dated October 21, 1968, as supplemented.

3.(c) Docket No. 71-6089

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.: 33-FE-100

(2) Description

A rectangular box, constructed of minimum 1/4" thick steel, approximately 20-1/2" x 20-1/2" x 147" long with flanged, bolted closure. Internal surfaces of the steel box, excluding the ends, shall be cadmium plated to a minimum 0.0025" thickness. Fuel element cavities are formed by 4" 0D 18-gage steel tubes lined with cardboard. Container is encased in 4" thick plywood box which is, in turn, encased in a steel shipping cage. Total weight, including contents, is 2,500 pounds.

(3) Drawings

The packaging is constructed in accordance with Gulf General Atomic Drawings Nos. 33-FE-100; FFE-601, Sheet 3, Issue B; and FFE-601, Sheet 4, Issue C.

Page 2 - Certificate No. 6089 - Revision No. 2 - Docket No. 71-6089

5. (b) Contents

(1) Type and form of material

Peach Bottom fuel elements containing not more than 291 grams U-235 with an overall moderating ratio of carbon to U-235 of 2400 to 1.0. Each fuel element is approximately 4" in diameter by 144" long containing pyrolytic-coated U-Th dicarbide blended with graphite and rhodium metal compacts loaded around a graphite sleeve. Graphite end reflectors are attached to each end of the loaded sleeve.

(2) Maximum quantity of material per package

Twenty-five (25) Peach Bottom fuel elements containing not more than 7.2 Kg U-235 and not more than type A quantity radioactive material.

(c) Fissile Class

II and III

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

0.4 per fuel element

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

Six (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: December 31, 1981.

REFERENCES

Gulf General Atomic, Inc. application dated October 21, 1968.

Supplements dated: October 29, November 25, and December 24, 1969; January 21 and July 6, 1970.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief

Transportation Certification Branch

Division of Fuel Cycle and

Material Safety

Date: JAN 26 1981