

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
9134	0	USA/9134/AF	1	2

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):
EG&G Idaho, Inc.
P.O. Box 1625
Idaho Falls, Idaho 83401

3.(b) Title and identification of report or application:
EG&G Idaho, Inc., Report No. PP-T-79-012,
ETR Fuel Element Shipping Containers, August 7, 1979
(Addendum to PR-T-79-011 [TR-466])

3.(c) Docket No. 71-9134

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: ETR

(2) Description

The inner container is a right parallelepiped 56-3/4 inches x 16-1/2 inches x 10-13/16 inches, constructed of 3/4 inch plywood, covered with 16-gage steel. The top and bottom are lined with 1/4 inch of high density polyethylene with 0.020-inch cadmium plate. The spacer separating the two layers of three fuel assemblies each consists of 1-inch high density polyethylene, 1-inch of latex foam rubber, and 0.040-inch cadmium plate. Positive closure is provided by a continuous hinge and two wire sealed hinge pins provide access.

The inner container is enclosed within an overpack, 71 inches x 21-1/4 inches x 15-3/8 inches, constructed of 1-inch plywood, framed by steel angle members and covered with 18-gage steel. Aluminum impact limiters (3-1/2 inches) are fixed to the ends of the overpack. Positive closure of the overpack is provided by four hinge pins which are secured in place using 1/16 inch diameter cotter pins. The package weight is approximately 690 pounds.

(3) Drawing

The packaging is fabricated in accordance with Idaho Nuclear Corporation ETR Drawing E-1012 - Rev. E (532-0642-47-400-021712).

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(b) Contents

(1) Type and Form of Material

Solid unirradiated material ETR or GETR fuel element or control rod follower pieces (one in each compartment) provided they contain no more than 520 grams of U-235 per element or follower piece.

(2) Maximum quantity of material per package not to exceed Type A quantities.

Six (6) fuel elements or control rod follower pieces.

Total U-235 content not to exceed 3,120 grams per package.

(c) Fissile Class

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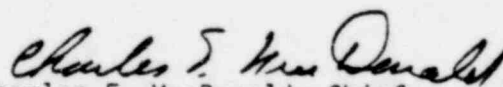
6. The contents shall be maintained within the respective element compartments and the active fuel lengths shall be completely within the regions of the cadmium covered spacers. Wood spacers may be used to accomplish this.
7. Chemical composition of the contents must not have a hydrogen atom density, when averaged over the volume of the contents, greater than that of water at one gram per cubic centimeter.
8. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
9. Expiration date: September 30, 1984.

REFERENCES

EG&G Idaho, Inc., Report No. PR-T-79-012, August 7, 1979.

Aerojet Nuclear Company, Report No. TR-466, June 30, 1975; or, EG&G Idaho, Inc., Report No. PR-T-79-011 (TR-466 reissued).

FOR THE U.S. NUCLEAR REGULATORY COMMISSION


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

Date: AUG 24 1979

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