

Georgia Institute of Technology

Neely Nuclear Research Center
Atlanta, Georgia 30332
(404) 894-3600



GEORGIA TECH 1885-1985

DESIGNING TOMORROW TODAY

November 15, 1985

Director
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Sir:

In accordance with the recent U.S.N.R.C. order to the Georgia Institute of Technology to move to a secure facility all unirradiated high enriched uranium fuel presently on-site, except for that needed to replace one failed element for each different type element in the core, and in accordance with 10CFR 71.12 subpart C, I hereby apply on behalf of the Georgia Institute of Technology to use NRC approved package, identification number USA/9134/B()F to ship the unirradiated fuel to Oak Ridge National Laboratory. A copy of the certificate is enclosed.

Due to the delay in transmittance of the NRC order (November 14, 1985) your assistance in expediting this matter will be appreciated.

Sincerely,

R.A. Karam
Director

RAK:jlr

8512050066 851120
PDR ADOCK 05000160
P PDR

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIALS PACKAGES

U.S. NUCLEAR REGULATORY COMMISSION

1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. PACKAGE IDENTIFICATION NUMBER	d. PAGE NUMBER	e. TOTAL NUMBER PAGES
9134	4	USA/9134/B()F	1	2

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):

Exxon Nuclear Idaho Company
P.O. Box 2800
Idaho Falls, ID 83401

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION:

EG&G Idaho, Inc., Report No. PR-T-79-012,
Rev. 1, ETR Fuel Element Shipping Container,
December 2, 1982 (Addendum to PR-T-79-011
(TR-4661))

c. DOCKET NUMBER: 71-9134

4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

(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 thick plywood, covered with 16-gauge steel. The top and bottom are lined with 1/4 inch of high density polyethylene with 0.020-inch thick 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 thick plywood, framed by steel angle members and covered with 18-gauge 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 No. E-1012, Rev. E (532-0642-47-400-021712).

8410162342

5. (b) Contents

(1) Type and Form of Material

Solid unirradiated aluminum plate type fuel element or control rod follower piece provided it contains no more than 520 grams (maximum of 300 grams/foot) of U-235 per element or follower piece.

(2) Maximum quantity of material per package

Six (6) fuel elements or control rod follower pieces (one in each compartment).

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

(c) Fissile Class

I

6. The contents must be maintained within the respective element compartments and the active fuel lengths must 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.
9. Expiration date: October 31, 1989.

REFERENCES

EG&G Idaho, Inc., Report No. PR-T-79-012, Rev. 1, December 2, 1982.

Aerojet Nuclear Company, Report No. TR-466, June 30, 1975 (Docket No. 71-9099); or, EG&G Idaho, Inc., Report No. PR-T-79-011 (TR-466 re-issued).

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

R H Olegarden

for

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

Date: OCT 09 1984

CORRESPONDENCE CONTROL TICKET

SECY NUMBER: 85-1005

OFFICE OF THE SECRETARY

LOGGING DATE 11/22/85

Davis, NMSS for approp. action

cys: Denton
Taylor
Grace
GCunningham/Burns
/ PDR
PAnderson

ACTION OFFICE: EDO

AUTHOR: R. A. Karam

AFFILIATION: Georgia Institute of Technology

LETTER DATE: 11/20/85

FILE CODE _____

ADDRESSEE: Hoyle

SUBJECT: Req extension period in compliance to 9/27/85 show cause order
re unirradiated fuel in non res reactors

ACTION: Appropriate

DISTRIBUTION: Don Carlson

SPECIAL HANDLING: None

SIGNATURE DATE:

FOR THE COMMISSION Champ

Rec'd Off. EDO
Date.....11-25-85
Time.....4:50P.....