January 6, 2009

Dr. James Shuler, Manager
Packaging Certification Program
Safety Management and Operations
Office of Environmental Management
U.S. Department of Energy
Washington, DC 20585

SUBJECT: CERTIFICATE OF COMPLIANCE NO. 9099 FOR THE ADVANCED TEST REACTOR FRESH FUEL SHIPPING CONTAINER

Dear Dr. Shuler:

As requested by your application dated November 19, 2008, enclosed is Certificate of Compliance No. 9099, Revision No. 11, for the Model No. Advanced Test Reactor Fresh Fuel Shipping Container. Changes made to the enclosed certificate are indicated by vertical lines in the margin. The staff's Safety Evaluation Report is also enclosed.

The Department of Energy has been a registered user of the package under the provisions of 10 CFR 71.17 or 49 CFR 173.471. The approval constitutes authority to use the package for shipment of radioactive material and for the package to be shipped in accordance with the provisions of 49 CFR 173.471.

If you have any questions regarding this certificate, please contact me or Chris Staab of my staff at (301) 492-3321.

Sincerely,

Eric Benner, Chief
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9099
TAC No. L24291

Enclosures:
1. Certificate of Compliance No. 9099, Rev. No. 11
2. Safety Evaluation Report

cc w/encls 1&2: R. Boyle, Department of Transportation

NRC FORM 618
(8-2000)
10 CFR 71

U.S. NUCLEAR REGULATORY COMM SSION

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES

a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9099	11	71-9099	USA/9099/B(U)F-85	1	OF 3

2. PREAMBLE

a. This certificate is issued to certify that the package (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)*

U.S. Department of Energy
Washington, DC 20585

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

ATR Fresh Fuel Shipping Container
Safety Analysis Report, INEL-94/0275
Application dated January 27, 1999, as supplemented.

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.: ATR

(2) Description

The inner container is a right parallelepiped, 69-7/16 inches x 26-13/16 inches x 6-15/16 inches, constructed of 3/4-inch plywood, covered with 16-gauge steel. The top and bottom are lined with high density polyethylene foam and with a 0.020-inch cadmium plate. Wood spacers covered with sponge rubber and with a 0.020-inch thick cadmium plate provide separation for four fuel assemblies. Positive closure is provided by a continuous hinge, and two wire sealed hinge pins provide access.

The inner container is enclosed within an overpack, 73-15/16 inches x 31-3/4 inches x 11-3/16 inches, constructed of 1-inch plywood, framed by steel angle members and covered with 18-gauge steel. Aluminum, honeycomb impact limiters 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 853 pounds.

(3) Drawings

The packaging is fabricated in accordance with EG&G Idaho, Inc., Drawing No. 445721, Sheets 1, 2, and 3; and EG&G Idaho, Inc., Drawing No. 445722, Sheets 1 and 2.

5. (b) Contents

(1) Type and form of material

Unirradiated ATR fuel elements. Each element contains 19 formed fuel plates, clad in Aluminum 6061. Each element contains a maximum of 1,100 grams of U-235 in uranium that is enriched to a maximum of 94 wt% in the U-235 isotope.

(2) Maximum quantity of material per package

Up to four (4) unirradiated ATR fuel elements. Total U-235 content not to exceed 4,400 grams per package.

(c) Transport Index for Criticality Control (Criticality Safety Index)

Minimum transport index to be shown on label for nuclear criticality control: 4.2

6. The contents must be maintained within its compartment and the active fuel length must be completely within the region of the cadmium covered spacers. Wood spacers may be used to accomplish this.

7. In addition to the requirements of Subpart G of 10 CFR Part 71:

(a) The package must be prepared for shipment and operated in accordance with the Operating Procedures in Chapter 7 of the application.

(b) Each packaging must be acceptance tested and maintained in accordance with the Acceptance Tests and Maintenance Program in Chapter 8 of the application.

8. Air transport of fissile material is not authorized.

9. Revision No. 10 of this certificate may be used until January 7, 2010.

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

11. Expiration date: January 31, 2014.

NRC FORM 618
(8 2000)
10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES

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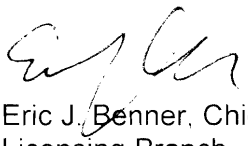
REFERENCES

ATR Fresh Fuel Shipping Container Safety Analysis Report, INEL-94/0275, January 27, 1999.

Supplements dated: February 18, 1999, April 27, 2000, December 5, 2003, and November 19, 2008.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION



Eric J. Benner, Chief
Licensing Branch
Division of Spent Fuel and Transportation
Office of Nuclear Material Safety
and Safeguards

Date: 1/6/09

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON D.C 20555-0001

SAFETY EVALUATION REPORT
Docket No. 71-9099
Model No. Advanced Test Reactor Fresh Fuel Shipping Container
Certificate of Compliance No. 9099
Revision No. 11

SUMMARY

By application dated November 19, 2008, the Department of Energy requested renewal of Certificate of Compliance No. 9099, for the Model No. Advanced Test Reactor Fresh Fuel Shipping Container. The Certificate of Compliance has been renewed with an expiration date of January 31, 2014.

EVALUATION

The applicant did not propose changes to the Certificate of Compliance. No container modifications or operational experience preclude the continued use of the container.

Condition No. 8 was added into the Certificate of Compliance to state that air transport of fissile material is not authorized. Condition No. 9 was added to authorize use of the previous revision for a period of approximately one year.

CONCLUSION

Based on the statements and representations contained in the renewal request and the conditions listed above, the staff concludes that the Model No. Advanced Test Reactor Fresh Fuel Shipping Container meets the requirements of 10 CFR Part 71. The Certificate of Compliance No. 9099 should be renewed until January 31, 2014.

Issued with Certificate of Compliance No. 9099,
Revision No. 11, on January 6, 2009.