#### NRC FORM 618 U.S. NUCLEAR REGULATORY COMMISSION (8-2000) 10 CFR 71 CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES b. REVISION NUMBER a. CERTIFICATE NUMBER c. DOCKET NUMBER d. PACKAGE IDENTIFICATION NUMBER PAGE PAGES 71-9274 USA/9274/AF OF 3 9274 11 1

#### 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)

Westinghouse Electric Company, LLC Columbia Fuel Fabrication Facility 5801 Bluff Road Hopkins, SC 29061

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

Westinghouse Electric Company application, Revision No. 4, dated November 21, 2003.

#### 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.: ABB-2901

## (2) Description

A shipping container for low-enriched uranium oxide pellets, composed of an inner container, surrounded by insulating material, and an outer drum. The inner container is  $10.75 \pm 1/4$  inches square and approximately 30 inches long, constructed of minimum 14-gauge steel, with bolted and gasketed top flange closure and welded bottom sheet. The inner container is centered and supported in an 18-gauge steel drum by asbestos or ceramic sheet, plywood, hardboard, and insulating material. The drum has a 16-gauge closure lid. The drum lid is closed with a 12-gauge locking ring with drop forged lugs and a 5/8-inch diameter bolt. In addition to the locking ring, three lid clamps are installed to secure the drum lid. The drum has approximate dimensions of 22.5-inch ID by 36-inch height. The uranium oxide pellets are packaged in boxes positioned within a steel insert. The maximum gross weight of the package is 660 pounds.

## (3) Drawings

The packaging is constructed and assembled in accordance with Westinghouse Electric Company, LLC, Drawing Nos.

10004E01, Rev. 2 10004E02, Sheets 1 and 2, Rev. 2; and 10004E03, Rev. 2.

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### 5. (b) Contents

(1) Type and form of material

Sintered uranium oxide pellets enriched to a maximum 5.0 w/o in the U-235 isotope. The maximum pellet diameter is 0.969 cm, and the minimum pellet diameter is 0.818 cm.

(2) Maximum quantity of material per package

227 pounds of pellets, with the U-235 content not to exceed 4.54 kg. The pellets must be packaged on corrugated stainless steel trays, within shipping container boxes and a shipping container insert in accordance with ABB Combustion Engineering Nuclear Systems Drawing Nos. L-9274-02, Sheets 1 and 2, Rev. 0, and L-9274-03, Rev. 0.

Maximum weight of contents within the inner container is 427 pounds, including radioactive material, secondary containers, and other packaging material.

- (c) Criticality Safety Index (minimum index to be shown on label): 0.5
- 6. Corrugated stainless steel trays must be positioned between each layer of pellets, and on the top and bottom of the pellet stack. Spacers must be inserted in partially filled pellet shipping boxes to provide a snug fit.
- 7. The package may also contain stainless steel pellets, depleted uranium pellets, and neutron poisons such as gadolinia, erbium, and boron carbide.
- 8. In addition to the requirements of Subpart G of 10 CFR Part 71:
  - (a) Prior to each shipment the insert (containment vessel) gasket shall be inspected. This gasket shall be replaced if inspection shows any defects.
  - (b) The package must be prepared for shipment and operated in accordance with the Operating Procedures of Chapter 7 and the Maintenance Program of Chapter 8 of the application.
- 9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.
- 10. Transport by air of fissile material is not authorized.
- 11. Expiration date: September 30, 2027.

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## <u>REFERENCES</u>

Westinghouse Electric Company application, Revision No. 4, November 21, 2003, reference NFT-NRC-03-010.

## FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Signed by Diaz-Sanabria, Yoira on 09/14/22

Yoira K. Diaz-Sanabria, Chief Storage and Transportation Licensing Branch Division of Fuel Management Office of Nuclear Material Safety and Safeguards

Date: September 14, 2022



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

#### SAFETY EVALUATION REPORT

Docket No. 71-9274
Model No. ABB-2901 Package
Certificate of Compliance No. 9274
Revision No. 11

### **SUMMARY**

By letter dated June 27, 2022, Westinghouse Electric Company, LLC. requested renewal of the Certificate of Compliance (CoC) No. 9274 for the Model No. ABB-2901 package. The Certificate of Compliance No. 9274, Revision No. 11, was renewed for five years.

#### **EVALUATION**

By letter dated June 27, 2022, Westinghouse Electric Company, LLC. requested renewal of CoC No. 71-9274 for the Model No. ABB-2901 package. No changes in the package design, operating procedures, acceptance tests and maintenance program or contents of the package were requested. There are no changes to the Safety Analysis Report (SAR) Revision 4, submitted in supplement dated November 21, 2003, Ref: NFT-NRC-03-010.

The staff reviewed the documents referenced in the Certificate of Compliance, Revision No. 11, and determined that the package application was complete.

#### CONDITIONS

Condition No. 11 has been revised to extend the CoC expiration date to September 30, 2027.

## CONCLUSION

Based on the statements and representations in the application, as supplemented, and the conditions listed above, the staff concludes that the Model No. ABB-2901 package design has been adequately described and evaluated and that these changes do not affect the ability of the package to meet the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9274, Revision No. 11.