NRC FORM 618 U.S. NUCLEAR REGULATORY COMMISSION (8-2000) 10 CFR 71 CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES a. CERTIFICATE NUMBER b. REVISION NUMBER c. DOCKET NUMBER d. PACKAGE IDENTIFICATION NUMBER PAGE PAGES 9217 21 71-9217 USA/9217/AF 1 OF 5

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)
 TN Americas LLC
 Suite 200
 7160 Riverwood Drive
 Columbia MD 21046

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION TN Americas LLC renewal application dated May 9, 2025

4. CONDITIONS

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

LEAR

5.

- (a) Packaging
 - (1) Model No.: ANF-250
 - (2) Description

A uranium oxide powder/pellet shipping container. The packaging consists of a 16-gauge steel inner vessel, approximately 11-1/2 inches ID by 57 inches long, with a bolted and gasketed top flange closure and steel welded bottom plate. The inner vessel is centered and supported in a 22-1/2-inch ID by 68-3/8-inch long, 16-gauge steel drum by twelve 1/4-inch diameter spring steel rods welded to the inner vessel at the top and the bottom of the vessel. A 3/8-inch thick steel flange and a 16-gauge inner band position and support the top of the inner vessel within the outer container. The annulus between the inner vessel and outer container is filled with vermiculite.

The inner vessel is closed by six 1/2-inch square shank studs with hex head nuts at each end. The outer container is closed with a 12-gauge locking ring with drop forged lugs and a 5/8-inch diameter bolt and lock nut. A "half circle" ("U") type closure ring is used. A product container insert is positioned within the inner vessel.

The maximum gross weight of the packaging and contents is 616 pounds.

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5.(a) (3) Drawings

- (i) The ANF-250 shipping container is constructed in accordance with Siemens Power Corporation Drawing No. EMF-306,175, Rev. 16.
- (ii) The pellet shipping suitcase is constructed in accordance with Siemens Power Corporation Drawing No. EMF-304,306, Rev. 8.
- (iii) The powder and pellet product container inserts are constructed in accordance with Siemens Power Corporation Drawing No. EMF-306,176, Rev. 6, Sheets 1 and 2.

(b) Contents

- (1) Type and form of material
 - (i) Dry uranium oxide powder enriched to a maximum 5.0 w/o in the U-235 isotope with or without burnable absorbers.
 - (ii) Dry uranium oxide pellets enriched to a maximum 5.0 w/o in the U-235 isotope with or without burnable absorbers.
 - (iii) Dry uranium oxide pellet scrap enriched to a maximum 5.0 w/o in the U-235 isotope with or without burnable absorbers.
 - (iv) Uranium oxide pellets enriched to a maximum of 1 w/o in the U-235 isotope with or without burnable absorbers.
 - (v) Uranium oxide pellet scrap enriched to a maximum of 1 w/o in the U-235 isotope with or without burnable absorbers.
 - (vi) Uranium oxide powder enriched to a maximum of 1 w/o in the U-235 isotope with or without burnable absorbers.
- (2) Maximum quantity of material per package

Not to exceed 310 pounds and:

(i) For the contents described in 5(b)(1)(i):

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5.(b)(2)(i) (continued)

The contents not to exceed the following:

Maximum Enrichment (wt% U-235)	Maximum Uranium Mass <u>(kg U)</u>	Maximum U-235 Mass (kg U-235)		
3.4	62.4	2.12		
3.8	41.0	1.56		
4.6	31.2	1.44		
5.0	27.7	1.38		

Not to exceed a maximum mass of 1149 g H, considering all sources of hydrogenous material within the inner vessel. The contents must be contained in product container described in 5(a)(3)(iii).

(ii) For the contents described in 5(b)(1)(ii):

The total contents not to exceed 120 kg U, with the U-235 content not to exceed 6 kg. Not to exceed a maximum mass of 1149 g H, including a maximum mass of 600 g polyethylene, considering all sources of hydrogenous material within the inner vessel. The contents must be contained in product container described in 5(a)(3)(ii).

(iii) For the contents described in 5(b)(1)(iii):

The total contents not to exceed 61.7 kg U, with the U-235 content not to exceed 3.08 kg. Not to exceed a maximum mass of 1149 g H, including a maximum mass of 600 g polyethylene, considering all sources of hydrogenous material within the inner vessel. The contents must be contained in product container described in 5(a)(3)(ii).

(iv) For the contents described in 5(b)(1)(iv):

The total contents not to exceed 120 kg U, with the U-235 content not to exceed 1.2 kg. The contents must be contained in product container described in 5(a)(3)(ii).

(v) For the contents described in 5(b)(1)(v):

The total contents not to exceed 120 kg U, with the U-235 content not to exceed 1.2 kg. The contents must be contained in product container described in 5(a)(3)(ii).

(vi) For the contents described in 5(b)(1)(vi):

The total contents not to exceed 120 kg U, with the U-235 content not to exceed 1.2 kg. The contents must be contained in product container described in 5(a)(3)(iii).

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5.(c) Criticality Safety Index

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

For contents described in 5(b)(1)(i) and limited in 5(b)(2)(i):

1.8

For contents described in 5(b)(1)(ii) and

5(b)(1)(iii), and limited in 5(b)(2)(ii) and 5(b)(2)(iii):

For contents described in 5(b)(1)(iv), 5(b)(1)(v) and 5(b)(1)(vi), and limited in 5(b)(2)(iv), 5(b)(2)(v) and 5(b)(2)(vi):

0.4

0.9

- 6. 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. The packaging must meet the Acceptance Tests and Maintenance Program in Chapter 8 of the application.
- 7. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.
- 8. Transport by air of fissile material is not authorized.
- 9. [Intentionally left blank]
- 10. Expiration date: September 30, 2030.

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

TN Americas LLC renewal application dated May 9, 2025

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Signed by Diaz-Sanabria, Yoira on 09/30/25

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

Date: September 30, 2025

SAFETY EVALUATION REPORT

Docket No. 71-9217 Model No. ANF-250 Certificate of Compliance No. 9217, Revision No. 21

SUMMARY

By letter dated May 9, 2025 (Agencywide Documents Access and Management System Accession No. ML25129A108), TN Americas LLC (certificate holder) requested renewal of Certificate of Compliance (CoC) No. 9217 for the Model No. ANF-250 package. The certificate holder did not request any changes to the package design, operating procedures, acceptance tests, or maintenance program of the package. The certificate has been renewed for an additional 5 years.

EVALUATION

By letter dated May 9, 2025, TN Americas LLC requested renewal of CoC No. 9217, for the Model No. ANF-250 without changes to the package design, operating procedures, acceptance tests, and maintenance program of the package. TN Americas LLC has a Quality Assurance Program Description Manual, Revision No. 17, for which Quality Assurance Program Approval for Radioactive Material Packages No. 0250, Revision No. 24, was issued by the U.S. Nuclear Regulatory Commission on February 24, 2022.

CONDITIONS

The following changes have been made to the CoC:

Condition No. 9 was deleted as the statement that was listed for the previous version of the certificate (i.e., CoC No. 9217, Revision No. 20) no longer applies and therefore left blank as a placeholder.

Condition No. 10 was revised to show the new expiration date of the certificate as September 30, 2025.

CONCLUSION

The certificate has been renewed for a 5-year term. These changes do not affect the ability of the package to meet the requirements of Title 10 of the *Code of Federal Regulations* Part 71.

Issued with CoC No. 9217, Revision No. 21.