



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

**SAFETY EVALUATION REPORT**  
**Docket No. 71-9309**  
**Model No. RAJ-II Package**  
**Certificate of Compliance No. 9309**  
**Revision No. 14**

**SUMMARY**

By letter dated July 14, 2023 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML23191A150), the U.S. Nuclear Regulatory Commission staff (the staff) issued Certificate of Compliance (CoC) USA/9309/B(U)F-96, Revision No. 13, to allow for the transportation of GNF 10x10 fuel assemblies with enrichments up to 8 weight percent (wt.%)  $^{235}\text{U}$ .

The issuance of CoC Revision No. 14 corrects an inadvertent error, found in table Nos. 3 and 5 of the CoC, and deletes an underline below the words 5 wt.%. No other changes were made.

**EVALUATION**

Table No. 3 showed GNF 10x10 fuel assemblies with an enrichment of 8 wt.%  $^{235}\text{U}$ . This error occurred when table No. 3 "Fuel Assembly Parameters" was split, for clarity reasons, into two tables (table 3 for CSI=1.0 and table 4 for CSI =1.6). Specifically, in table No. 3 (CSI=1.0), the  $^{235}\text{U}$  Pellet Enrichment and Lattice Average Enrichment is  $\leq 5.0$  wt.% for GNF 10x10; it is  $\leq 8.0$  wt.% in table No. 4 for CSI = 1.6.

Table No. 5 of the CoC included two rows for "Polyethylene Equivalent Mass per Compartment." The first row was no longer consistent with table 6-2 of the application and was deleted for clarity. The second row was not modified. An inadvertent underline for the words "5 wt.%" was also removed.

As stated in the SER for Revision No. 13 of the CoC, the polyethylene equivalent mass for 8x8, 9x9, and 10x10  $\text{UO}_2$  is unlimited in all cases for rods less than 5 wt.%  $^{235}\text{U}$ . For BWR 10x10 rods greater than 5 wt.% but less than 8 wt.%  $^{235}\text{U}$ , there is a polyethylene mass limit of 32.1 kg when these rods are stored within the stainless-steel pipe. In all other configurations, the polyethylene mass is unlimited (i.e., there is a mass limit in the stainless-steel pipe when the enrichment  $X$  is  $5 \text{ wt.}\% \leq X \leq 8 \text{ wt.}\%$   $^{235}\text{U}$ ).

**CONCLUSION**

Based on the statements and representations in the application, and the conditions listed in the CoC, the staff concludes that the package meets the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 71.

Issued with CoC No. 9309, Revision No. 14.