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

August 2, 2022

Doug Nay
Facility Manager
Global Nuclear Fuel – Americas LLC
3901 Castle Hayne Road
P.O. Box 780
Wilmington, NC 28402

SUBJECT: GLOBAL NUCLEAR FUEL – AMERICAS, LLC: APPROVAL OF SAFETY ANALYTIC METHODS FOR ENRICHMENT UP TO 20 WEIGHT PERCENT URANIUM-235 (ENTERPRISE PROJECT IDENTIFICATION NUMBER L-2022-LLA-0012)

Dear Doug Nay:

By letter dated January 20, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22020A129), Global Nuclear Fuel – Americas, LLC (GNF-A) requested Nuclear Regulatory Commission (NRC) approval to use its current nuclear criticality safety analytic methods, validation techniques, and minimum margin of subcriticality (MMS) described in NRC license SNM-1097, Chapter 5, "Nuclear Criticality Safety," for applications involving enrichments less than or equal to (≤) 20 weight percent (wt.%) uranium-235 (^{235}U) in support of planned operations involving high assay low-enriched uranium. The NRC staff accepted the submittal for formal review in a letter dated March 2, 2022 (ML22059A089). By letter dated July 1, 2022 (ML22182A388), GNF-A responded to the NRC's request for additional information (RAI) letter dated June 8, 2022 (ML22147A123).

Based on a review of the submittal and responses to the RAIs, the NRC staff concludes that the licensee's current nuclear criticality safety analytic methods, validation techniques, and MMS are acceptable for use up to 20 wt.% ^{235}U for the purposes of performing nuclear criticality safety analyses (as delineated in the safety evaluation report (SER)). This SER does not provide any conclusions regarding the physical possession and/or processing of special nuclear material in excess of current possession limits. Enclosed is the SER that documents the review. Enterprise Project Identification number L-2022-LLA-0012 is considered closed.

Documents transmitted herewith contain Proprietary or Security-Related Information. When separated from the sensitive conditions in the enclosure, this document is decontrolled.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter and Enclosure 1 will be available electronically for public inspection in the NRC Public Document Room (PDR) and in ADAMS. ADAMS is accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html. The PDR is open by appointment only. You may submit your request to the PDR via e-mail at PDR.Resource@nrc.gov or call 1-800-397-4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

If you have any questions concerning this matter, please contact me or Mr. Jonathan Rowley by telephone at 301-415-4053 or via e-mail at jonathan.rowley@nrc.gov.

Sincerely,

YawarFaraz

Yawar H. Faraz, Acting Branch Chief
Fuel Facility Licensing Branch
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 70-1113
License No. SNM-1097

Enclosure:
Safety Evaluation Report (Non-public)

cc: gnfa@listmgr.nrc.gov

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DATED: August 02, 2022

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