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~~Proprietary Notice~~

~~This letter transmits proprietary information in accordance with 10 CFR 2.390.~~ Upon the removal of Enclosure 1, the balance of the letter may be considered non-proprietary.

M210163
December 17, 2021

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

Subject: Submittal of Revision 0 of LANCR02/PANAC11 and Revision 4 of LANCR02 Licensing Topical Reports

Global Nuclear Fuel-Americas (GNF-A) is updating nuclear methods to enable the introduction of enrichment levels above current licensed limits.

This submittal includes Revision 4 of LANCR02 Lattice Physics Model Description (NEDC-33376P, December 2012), Qualification (NEDC-33377P, December 2021), and Revision 0 of the LANCR02/PANAC11 Application Methodology (NEDC-33935P, December 2021) Licensing Topical Reports.

Relative to review duration, GNF-A requests a 12-month review cycle plus 3-months for ACRS review, if required. Our intention is to use these approved methods to license a specific core reload with increased enrichments in the Fall of 2024. Because the LANCR topical reports are feeding information to the downstream methods, this time period is required to ensure that all method updates are complete to enable design, analysis, and fabrication of this core reload of fuel.

Please note that Enclosures 1, 4, and 7 contain proprietary information of the type that GNF maintains in confidence and withholds from public disclosure. The information has been handled and classified as proprietary to GNF-A as indicated in its affidavit, also included in the reports. The affidavits contained in Enclosures 3, 6, and 9 identify that the information contained in Enclosures 1, 4, and 7 have been handled and classified as proprietary to GNF-A. GNF-A hereby

requests that the information in Enclosures 1, 4, and 7 be withheld from public disclosure in accordance with the provisions of 10CFR2.390 and 9.17.

Enclosures 2, 5, and 8 contain non-proprietary versions of the content in Enclosures 1, 4, and 7.

If you have any questions, please contact me directly (910-819-5307).

Sincerely,



Kent Halac
Senior Engineer, Regulatory Affairs
Global Nuclear Fuel – Americas, LLC

Project No. 712 / Docket No. 99901376

Enclosures:

1. LANCR02 Lattice Physics Model Description Licensing Topical Report, NEDC-33376P, Revision 4, December 2021 - GNF Proprietary Information
2. LANCR02 Lattice Physics Model Description Licensing Topical Report, NEDO-33376, Revision 4, December 2021 - Non-Proprietary Information
3. Affidavit for NEDC-33376P, Revision 4, dated December 17, 2021
4. LANCR02 Lattice Physics Model Qualification Licensing Topical Report, NEDC-33377P, Revision 4, December 2021 - GNF Proprietary Information
5. LANCR02 Lattice Physics Model Qualification Licensing Topical Report, NEDO-33377, Revision 4, December 2021 - Non-Proprietary Information
6. Affidavit for NEDC-33377P, Revision 4, dated December 17, 2021
7. LANCR02/PANAC11 Application Methodology Licensing Topical Report, NEDC-33935P, Revision 0, December 2021 - GNF Proprietary Information
8. LANCR02 Lattice Physics Model Description Licensing Topical Report, NEDO-33935, Revision 0, December 2021 - Non-Proprietary Information
9. Affidavit for NEDC-33935P, Revision 0, dated December 17, 2021

cc: K Lenning, NRC
MP Catts, GEH Wilmington
BR Moore, GNF Wilmington

PLM Specifications 006N9005 R0, NEDC-33376P R4, NEDO-33376 R4,
NEDC-33377P R4, NEDO-33377 R4, NEDC-33935P R0, and NEDO-33935 R0

Document Components:

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