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Proprietary Notice

This letter transmits proprietary information in accordance with 10CFR2.390. Upon the removal of Enclosures 1, 4, and 7 the balance of the letter may be considered non-proprietary.

MFN 10-045 March 5, 2010

U.S. Nuclear Regulatory Commission Document Control Desk Washington, D.C. 20555-0001 Andy Lingenfelter Vice President, Fuel Engineering

Global Nuclear Fuel – Americas, LLC Castle Hayne Road, Wilmington, NC 28401 (910) 819-5954 Fax: (910) 675-6614 Andy.Lingenfelter@gnf.com

Subject: Amendment 33 to NEDE–24011–P, General Electric Standard Application for Reactor Fuel (GESTAR II) and GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II), NEDC-33270P, Revision 3, March 2010.

This letter submits Amendment 33 to GESTAR II and Revision 3 of the GNF2 Advantage Generic Compliance report to implement the Global Nuclear Fuel (GNF) PRIME methodology which was approved by the NRC in Reference 1. There are three parts of this submittal:

- 1. The NRC Amendment 32 Safety Evaluation follow-on items and the GNF responses,
- 2. The revised Section 2 of GESTAR II to implement the PRIME methodology as well as the committed changes for GNF2 and future fuel designs, and
- 3. A revision to the GNF2 Advantage Generic Compliance report which includes the PRIME design basis.

The first two elements are submitted for NRC review and approval.

The third element, the GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II), documents the completion of the requirements for a new fuel design per the criteria defined in GESTAR II. The analyses and evaluations in Revision 3 of the GNF2 Advantage Generic Compliance report demonstrate that the GNF2 fuel design meets the revised criteria as defined in the proposed Section 2 of GESTAR II.

In accordance with Reference 2, GNF requests that the NRC review be completed within 6 months following the receipt of this submittal in order to support the second reload of GNF2 fuel at the Entergy Fitzpatrick plant in September 2010.

Enclosures 1, 4, and 7 contain proprietary information of the type that GNF maintains in confidence and withholds from public disclosure. The affidavits contained within Enclosures 3, 6, and 9 identify that the information contained in Enclosures 1, 4, and 7 has been handled and classified as proprietary to GNF. GNF hereby requests that the information in Enclosure 1, 4, and 7 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. Enclosures 2, 5, and 8 are non-proprietary versions of Enclosures 1, 4, and 7, respectively.

If you have any questions about the information provided here, please contact me at (910) 819-5954 or Jim Harrison at (910) 819-6604.

Sincerely,

Andrew A. Lingenfelter

Vice President, Fuel Engineering

Global Nuclear Fuel-Americas, LLC

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Project No. 712

References

- Letter from TB Blount (NRC) to AA Lingenfelter (GNF), Subject: Final Safety Evaluation For Global Nuclear Fuel – Americas Topical Reports NEDC-33256P, NEDC-33257P, and NEDC-33258P, "The PRIME Model For Analysis Of Fuel Rod Thermal-Mechanical Performance" (TAC NO. MD4114), January 22, 2010.
- 2. Letter from H.N. Berkow (US NRC) to J.F. Klapproth (GE), Implementation of a Revised Review Process for Topical Reports, October 21, 2003.

Enclosures

- 1. Amendment 32 Safety Evaluation Follow-on Items and GNF Response Proprietary Information
- 2. Amendment 32 Safety Evaluation Follow-on Items and GNF Response Non-Proprietary Information
- 3. Affidavit for Enclosure 1
- 4. Amendment 33 to NEDE–24011–P, General Electric Standard Application for Reactor Fuel (GESTAR II) Proprietary Information
- 5. Amendment 33 to NEDO-24011, General Electric Standard Application for Reactor Fuel (GESTAR II) Non-Proprietary Information

- 6. Affidavit for Enclosure 4
- 7. GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II), NEDC-33270P, Revision 3, March 2010 Proprietary Information
- 8. GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II), NEDO-33270, Revision 3, March 2010 Non-Proprietary Information
- 9. Affidavit for Enclosure 7

cc: SS Philpott, NRC
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JG Head, GEH Wilmington
PL Campbell, GEH Washington, DC
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Document Components:

001 MFN 10-045 Cover Letter.pdf
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