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### **Proprietary Notice**

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

MFN 09-436 June 30, 2009

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: GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II),

NEDC-33270P, Revision 2, June 2009 and GEXL Correlation for GNF2 Fuel,

NEDC-33292P, Revision 3, June 2009

This letter transmits Revision 2 to the GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II). The initial issue of the GNF2 Compliance Report covered the application of GNF2 fuel for BWR-3 through BWR-6 plants. This limitation was necessary for schedule reasons because the work scope for the BWR-2 product line was not complete. The changes relative to Revision 1 (Reference 1) include the addition of application of GNF2 fuel for BWR-2 plants. Unrelated to the BWR-2 changes, Section 3.5 of report is modified to include the GNF2 pressure drop data for the cosine axial power shape. In addition, References are updated in Section 6.0. Each change is noted in the Revisions summary table and by side bars in the right hand margin of the report.

This letter also transmits Revision 3 of the GEXL17 Correlation for GNF2 Fuel in accordance with the provisions of GESTAR II (Reference 3). Using the criteria established in GESTAR II Section 1.1.7b and c, Revision 3 of the GEXL17 correlation has been established based on the same terms and form as the previous Revision. The changes in Section 6 relative to Revision 2 (Reference 2) includes the comparisons of calculated versus measured data from the GNF2 cosine axial power shape transient boiling transition tests. Minor error corrections, and editorial changes have also been made. Each change is noted in the Revisions summary table and by side bars in the right hand margin of the report.

Please note that Enclosures 1 and 4 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 report. The affidavits contained in Enclosures 3 and 6 identify that the information contained in Enclosures 1 and 4 have been handled and classified as proprietary to GNF-A. GNF-A hereby requests that the information in Enclosures 1 and 4 be withheld from public disclosure in accordance with the provisions of 10CFR2.390 and 9.17.

Enclosure 1 is the proprietary version of the GNF2 Compliance report and Enclosure 2 is a non-proprietary version. Enclosure 3 contains the affidavit.

Enclosure 4 is the proprietary version of the GEXL17 Correlation for GNF2 Fuel report and Enclosure 5 is a non-proprietary version. Enclosure 6 contains the affidavit.

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

- 1. Lettter from AA Lingenfelter (GNF) to Document Control Desk (US NRC), Subject: GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II), NEDC-33270P, August 2008, FLN-2008-008, August 29, 2008.
- 2. Letter from AA Lingenfelter (GNF) to Document Control Desk (US NRC), Subject: GEXL17 Correlation for GNF2 Fuel, NEDC-33292P, Revision 2, December 2007, FLN-2007-037, December 14, 2007.
- 3. General Electric Standard Application for Reactor Fuel (GESTAR II), NEDE-24011-P-A-16, and the US Supplement NEDE-24011-P-A-16-US, November 2007.

#### **Enclosures**

- 1. GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II), NEDC-33270P, Revision 2, June 2009 GNF Proprietary Information
- 2. GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II), NEDO-33270, Revision 2, June 2009 Non-Proprietary Information
- 3. Affidavit for NEDC-33270P, Revision 2, dated June 30, 2009
- 4. NEDC-33292P, Revision 3, June 2009 GNF Proprietary Information
- 5. NEDO-33292, Revision 3, June 2009 Non-Proprietary Information
- 6. Affidavit for NEDC-33292P, Revision 3, dated June 30, 2009

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cc: MC Honcharik, NRC
SS Philpott, NRC
AA Lingenfelter, GNF Wilmington
JF Harrison, GEH Wilmington
JG Head, GEH Wilmington
GA Luciano, GNF Wilmington
RM Fawcett, GNF Wilmington

eDRFSection 0000-0065-5410 Revision 2 - NEDC-33270 Revision 2 eDRFSection 0000-0061-7470 Revision 4 - NEDC-33292 Revision 3

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