Global Nuclear Fuel
A Joint Venture of GE, Toshiba, & Hitachi

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**Proprietary Notice**

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

MFN 10-046
September 15, 2010

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

**Subject: Accepted Versions of Global Nuclear Fuel – Americas Topical Reports NEDC-33256P, "The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance Part 1 – Technical Bases," NEDC-33257P, "The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance Part 2 – Qualification," and NEDC -33528P, "The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance Part 3 – Application Methodology" (TAC # MD4114)**

By Reference 1, the NRC issued the final Safety Evaluation for Global Nuclear Fuel–Americas (GNF-A), Licensing Topical Reports (LTR) NEDC-33256P, Revision 0, "The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance Part 1 – Technical Bases," NEDC-33257P, Revision 0, "The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance Part 2 – Qualification," and NEDC-33258P, Revision 0, "The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance Part 3 – Application Methodology." The NRC requested in Reference 1 that GNF-A publish accepted proprietary and non-proprietary versions of the LTRs incorporating the Safety Evaluation and GNF-A responses to the associated NRC requests for additional information (References 2, 3, and 4).

Because the three PRIME methodology reports were reviewed and approved as one entity, the enclosed accepted (-A) versions of the subject LTRs have been integrated into a single document. The document comprises the SE, each constituent –A report, and the composite RAI responses. The cover page of the document carries the numbering and titling for each of the reports. The reports have been updated in accordance with comittments made in the RAI responses and to incorporate the limitations and conditions of the SE. Therefore, the –A reports are labelled Revision 1. One affidavit is provided for the integrated report.

Enclosure 1 contains proprietary information of the type that GNF-A maintains in confidence and withholds from public disclosure. The affidavit contained in Enclosure 3 identifies that the information contained in Enclosure 1 has been handled and classified as proprietary to GNF-A. GNF-A hereby requests that the information in Enclosure 1 be withheld from public disclosure in accordance with the provisions of 10CFR2.390 and 9.17. Enclosure 2 is the non-proprietary version of Enclosure 1.

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

Project No. 712

References

1. Letter from TB Blount (USNRC) 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 AA Lingenfelter (GNF) to Document Control Desk (USNRC), Subject: Request for Additional Information Response for the PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance (TAC No. MD4114), MFN 09-106, February 27, 2009.

3. Letter from AA Lingenfelter (GNF) to Document Control Desk (USNRC), Subject: Supporting Information for Request for Additional Information Response for the PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance (TAC No. MD4114), MFN 09-106 Supplement 1, February 27, 2009.

4. Letter from AA Lingenfelter (GNF) to Document Control Desk (USNRC), Subject: Response to Supplement To Request For Additional Information Re: Licensing Topical Reports NEDC-33256P, NEDC-33257P, and NEDC-33258P, "The PRIME Model For Analysis of Fuel Rod Thermal-Mechanical Performance" (TAC No. MD4114), MFN 09-106 Supplement 2, August 11, 2009.

Enclosures

1. The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance: Part 1 – Technical Bases, NEDC-33256P-A, Revision 1, September 2010, Part 2 – Qualification, NEDC-33257P-A, Revision 1, September 2010, Part 3 – Application Methodology, NEDC-33528P-A, Revision 1, September 2010 – GNF-A Proprietary Information

2. The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance: Part 1 – Technical Bases, NEDO-33256-A, Revision 1, September 2010, Part 2 – Qualification, NEDO-33257-A, Revision 1, September 2010, Part 3 – Application Methodology, NEDO-33528-A, Revision 1, September 2010 – Non-Proprietary Information

3. Affidavit dated September 2010

cc: SS Philpott, US NRC
AA Lingenfelter, GNF/Wilmington
JG Head, GEH/Wilmington
PL Campbell, GEH/Washington DC
JFHarrison, GEH/Wilmington
eDRF Section 0000-0113-1123

**Document Components:**
001 MFN 10-046 Cover Letter.pdf
002 MFN 10-046 Enclosure 1 Proprietary.pdf
003 MFN 10-046 Enclosure 2 Non-Proprietary.pdf
004 MFN 10-046 Enclosure 3 Affidavit.pdf