



**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 09-106

February 27, 2009

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

**Subject: Request for Additional Information Response for the PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance (TAC # MD4114)**

Global Nuclear Fuel–Americas, LLC submitted the PRIME Model for Analysis of Fuel Rod Thermal–Mechanical Performance for review and approval by Reference 1 in January 2007. The first draft Requests for Information (RAIs) from the NRC staff arrived on November 28, 2007 and continued through various communications in 2008. In Reference 2, GNF committed to provide the verified RAI responses by February 27, 2009. This letter provides complete verified responses for all of the PRIME RAIs.

Please note that Enclosure 1 contains 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. 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 a 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

#### References

1. Letter from AA Lingenfelter (GNF) to Document Control Desk (USNRC), Subject: GNF Licensing Topical Report, “The PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance,” NEDC-33256P, NEDC-33257P, and NEDC-33258P, January 2007, FLN-2007-001, January 19, 2007.
2. Letter from AA Lingenfelter (GNF) to Document Control Desk (USNRC), Subject: Commitment to Complete PRIME Request for Information Responses by February 27, 2009. (TAC #MD4114), MFN 09-103, February 3, 2009.

#### Enclosures

1. Request for Additional Information Response for the PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance - GNF Proprietary Information
2. Request for Additional Information Response for the PRIME Model for Analysis of Fuel Rod Thermal – Mechanical Performance - Non-Proprietary Information
3. Affidavit dated February 2009

cc: MC Honcharik, US NRC  
SS Philpott, US NRC  
PC Clifford, US NRC  
AA Lingenfelter, GNF/Wilmington  
RE Brown, GEH/Wilmington  
eDRF Section 0000-0097-4245

#### Document Components:

001 MFN 09-106 Cover Letter.pdf  
002 MFN 09-106 Enclosure 1 Proprietary.pdf  
003 MFN 09-106 Enclosure 2 Non-Proprietary.pdf  
004 MFN 09-106 Enclosure 3 Affidavit.pdf