



**Global Nuclear Fuel**

A Joint Venture of GE, Toshiba, & Hitachi

**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.

FLN-2007-028  
September 06, 2007

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)675-5954 Fax: (910)675-6614  
Andy.Lingenfelter@gnf.com

Subject: Transmittal of GNF-A Topical Report, NEDC-33376P, *LANCR02 Lattice Physics Model Description*, September, 2007

Global Nuclear Fuel-Americas (GNF-A) has developed advanced lattice physics (LANCR02) and core simulator (AETNA02) nuclear methods for application in GE-Hitachi Nuclear Energy (GEH) BWRs. GNF-A will migrate to the LANCR02/AETNA02 methodology for all BWRs following approval by NRC. .

In the reference 1 call, GNF-A and USNRC discussed the plan for the review process and schedule for submittals. As agreed in the call, GNF-A will use a phased process for submitting these topical reports. The phases would be a Model Description, Model Qualification, and User Manuals for both LANCR02 and AETNA02, and an Application Methodology for the combined LANCR02/AETNA02 model. GNF-A's formal request for USNRC review and approval would not be made until all the phased topicals had been submitted.

The first submittal, the LANCR02 lattice physics model description, is being transmitted with this letter. A pre-submittal kickoff meeting for the LANCR02 lattice physics model description topical is tentatively scheduled in October. A pre-submittal kickoff meeting for the other phases is planned for spring 2008.

The remaining submittals are shown below.

- LANCR02 Lattice Physics Model Description – Submitted with this letter in Enclosure 1 (proprietary) and Enclosure 2 (non-proprietary)
- LANCR02 Lattice Physics Qualification
- LANCR02 User Manual
- AETNA02 BWR Core Simulator Model Description
- AETNA02 BWR Core Simulator Qualification
- AETNA02 User Manual

DO65

URR

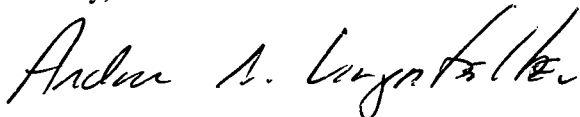
- LANCR02/AETNA Application for Steady-State Nuclear Methods

The LANCR02 Lattice Physics Qualification topical is planned to be submitted it late 2007 or early 2008. The remainder of the reports will submitted through 2008 and into 2009.

Please note that Enclosure 1 contains proprietary information of the type that GNF-A maintains in confidence and withholds from public disclosure. The information has been handled and classified as proprietary to GNF-A as indicated in the enclosed 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 10 CFR 2.390 and 9.17. Enclosure 2 is a non-proprietary version of Enclosure 1.

If you have any questions, please contact me.

Sincerely,



Andrew A. Lingenfelter  
Vice President, Fuel Engineering  
Global Nuclear Fuel–Americas, LLC

Project No. 710

Reference:

1. Teleconference between USNRC (A. Mendiola, MC Honcharik) and GEH (S. Bowman, R. Kingston, J. Harrison) regarding GNF-A submittal and USNRC review of GNF-A advanced nuclear methods codes June 27, 2007

Enclosures:

1. GNF-A Topical Report NEDC-33376P, *LANCR02 Lattice Physics Model Description*, September, 2007, GNF Proprietary Information
2. GNF Topical Report NEDO-33376, *LANCR02 Lattice Physics Model Description*, September, 2007, Non-proprietary
3. Affidavit, Andrew A. Lingenfelter, dated September 06, 2007

cc: JM Andersen (GNF/Wilmington)  
RE Brown (GEH/Wilmington)  
Scott Bowman (GEH/Wilmington)

PL Campbell (GEH/Washington)  
MJ Colby (GEH/Wilmington)  
MC Honcharik (NRC)  
RE Kingston (GEH/Wilmington)  
JF Klapproth (GEH/Wilmington)  
MA Lalor (GEH/San Jose)  
GB Stramback (GEH/San Jose)  
PT Tran (GEH/Vallecitos)  
eDRF Section 0000-0074-0492