



**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.

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Manager, Engineering**

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FLN-2007-023  
July 5, 2007

Docket No. 52-010

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

**Subject: Transmittal of GNF Report "COBRAG Subchannel Code - Model Description Report," NEDE-32199P, Revision 1, July 2007, Supporting the GE ESBWR Design Control Document**

This letter transmits the COBRAG Subchannel Code - Model Description Report," NEDE-32199P, Revision 1, dated July 2007. Revision 0 of this report was an internal document and was not submitted to the NRC. The report number and revision status was maintained to preserve the integrity of internal record systems. This submittal is provided to support the ESBWR application per the commitment of Reference 1.

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, also included in the report. 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 1 is the proprietary version of the COBRAG Subchannel Code - Model Description Report and Enclosure 2 is a non-proprietary version. Enclosure 3 contains the affidavit.

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If you have any questions about the information provided here, please contact me at (910) 675-5954 or Jim Harrison at (910) 675-6604.

Sincerely,



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

References

1. Letter JC Kinsey (GE) to Document Control Desk (US NRC), Subject: Integrated Plan and Schedule – ESBWR Design Certification Application, MFN 07-200, April 19, 2007.

Enclosures

1. COBRAG Subchannel Code - Model Description Report, NEDE-32199P, Revision 1, July 2007 - GNF Proprietary Information
2. COBRAG Subchannel Code - Model Description Report, NEDO-32199, Revision 1, July 2007 - Non-Proprietary Information
3. Affidavit, dated July 5, 2007

cc: AE Cabbage USNRC  
MC Honcharik, USNRC  
JGM Andersen, GNF/Wilmington  
PL Campbell, GHNEA, Washington  
RE Brown, GHNEA/Wilmington  
JF Harrison, GHNEA/Wilmington  
GB Stramback GHNEA/San Jose  
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eDRFSection 0000-0069-4710

# ENCLOSURE 1

FLN-2007-023

COBRAG Subchannel Code - Model Description Report,  
NEDE-32199P, Revision 1, July 2007

## GNF Proprietary Information

### **PROPRIETARY INFORMATION NOTICE**

This enclosure contains proprietary information of the Global Nuclear Fuel–Americas, L.L.C. (GNF-A) and is furnished in confidence solely for the purpose(s) stated in the transmittal letter. No other use, direct or indirect, of the document or the information it contains is authorized. Furnishing this enclosure does not convey any license, express or implied, to use any patented invention or, except as specified above, any proprietary information of GNF-A disclosed herein or any right to publish or make copies of the enclosure without prior written permission of GNF-A.

The header of each page in this document carries the notation “GNF Proprietary Information.” Proprietary information of GNF is indicated as the content contained between opening double brackets ( [[ ) and closing double brackets ( ] ] ), and the text is underlined with dots. [[This sentence is an example.<sup>(3)</sup>]] Figures and large equation objects are identified with double square brackets before and after the object. In each case, the superscript notation<sup>(3)</sup> refers to Paragraph (3) of the enclosed affidavit, which provides the basis for the proprietary determination. Specific information that is not so marked is not GNF proprietary.

**ENCLOSURE 2**

**FLN-2007-023**

**COBRAG Subchannel Code - Model Description Report,  
NEDE-32199P, Revision 1, July 2007**

**Non-Proprietary Information**

**IMPORTANT NOTICE**

This is a non-proprietary version of Enclosure 1 to FLN-2007-023, which has the proprietary information removed. Portions of the document that have been removed are indicated by white space with an open and closed bracket as shown here [[ ]].

ENCLOSURE 3

FLN-2007-023

Affidavit

**Global Nuclear Fuel – Americas**  
**AFFIDAVIT**

**I, Andrew A. Lingenfelter**, state as follows:

- (1) I am Manager, Engineering, Global Nuclear Fuel – Americas, L.L.C. (“GNF-A”), and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.
- (2) The information sought to be withheld is contained in the GNF-A proprietary report, NEDE-32199P, *COBRAG Subchannel Code - Model Description Report*, Class III (GNF Proprietary Information), Revision 1, dated July 2007. The GNF-A proprietary information is identified by [[a dotted underline inside double square brackets<sup>(3)</sup>]]. Figures and other large objects are identified with double square brackets before and after the object. In each case, the superscript notation {3} refers to Paragraph (3) of this affidavit, which provides the basis for the proprietary determination.
- (3) In making this application for withholding of proprietary information of which it is the owner or licensee, GNF-A relies upon the exemption from disclosure set forth in the Freedom of Information Act (“FOIA”), 5 USC Sec. 552(b)(4), and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10 CFR 9.17(a)(4), and 2.390(a)(4) for “trade secrets” (Exemption 4). The material for which exemption from disclosure is here sought also qualify under the narrower definition of “trade secret”, within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).
- (4) Some examples of categories of information which fit into the definition of proprietary information are:
  - a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by GNF-A's competitors without license from GNF-A constitutes a competitive economic advantage over other companies;
  - b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product;
  - c. Information which reveals aspects of past, present, or future GNF-A customer-funded development plans and programs, resulting in potential products to GNF-A;

- d. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs (4)a. and (4)b. above.

- (5) To address 10 CFR 2.390 (b) (4), the information sought to be withheld is being submitted to NRC in confidence. The information is of a sort customarily held in confidence by GNF-A, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by GNF-A, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties including any required transmittals to NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.
- (6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge, or subject to the terms under which it was licensed to GNF-A. Access to such documents within GNF-A is limited on a "need to know" basis.
- (7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his delegate), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside GNF-A are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- (8) The information identified in paragraph (2) is classified as proprietary because it contains details of GNF-A's fuel design and licensing methodology.

The development of the methods used in these analyses, along with the testing, development and approval of the supporting methodology was achieved at a significant cost, on the order of several million dollars, to GNF-A or its licensor.

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GNF-A's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GNF-A's comprehensive BWR safety and technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology and includes development of the expertise to determine and apply the appropriate evaluation process. In addition, the technology base includes the value derived from providing analyses done with NRC-approved methods.

The research, development, engineering, analytical, and NRC review costs comprise a substantial investment of time and money by GNF-A.

The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

GNF-A's competitive advantage will be lost if its competitors are able to use the results of the GNF-A experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to GNF-A would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive GNF-A of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing and obtaining these very valuable analytical tools.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information, and belief.

Executed on this 5<sup>th</sup> day of July 2007.



Andrew A. Lingenfelter  
Manager, Engineering  
Global Nuclear Fuel – Americas, L.L.C.