



Global Nuclear Fuel

A Joint Venture of GE, Toshiba, & Hitachi

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Proprietary Notice

FLN-2007-011
March 14, 2007

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

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

**Subject: GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II),
NEDC-33270P, March 2007, and
GEXL17 Correlation for GNF2 Fuel, NEDC-33292P, March 2007**

This letter transmits two reports documenting completion of the fuel licensing qualification for the GNF2 fuel design in accordance with the provisions of GESTAR II (Reference 1). As required by the SER for GESTAR II Amendment 22 (Reference 2), the next revision of the Fuel Bundle Design report, NEDC-31152P, will be updated to include GNF2 fuel design information.

(1) The GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II) report documents the completion of the requirements for a new fuel design per the criteria defined in GESTAR II. Section 1.1 of GESTAR II defines a set of fuel licensing acceptance criteria for evaluating new fuel designs and for determining the applicability of generic analyses to these new designs. As stated in GESTAR II, "Fuel design compliance with the fuel licensing acceptance criteria constitutes USNRC acceptance and approval of the fuel design without specific USNRC review." All of the criteria defined in GESTAR II have been met for the GNF2 fuel design.

(2) The GEXL17 Correlation for GNF2 Fuel report documents the testing and correlation development of the critical power correlation supporting the GNF2 fuel design. Using the criteria established in GESTAR II Section 1.1.7b and c, the GEXL17 correlation has been established based on the same terms and form as the previous correlation. The new correlation is based on significant new data for the GNF2 fuel design.

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 reports. The affidavits contained in Enclosures 3 and 6 identify that the information contained in Enclosures 1 and 4 has 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 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) 675-5954 or Jim Harrison at (910) 675-6604.

Sincerely,



Andrew A. Lingenfelter
Manager, Engineering

Global Nuclear Fuel-Americas, LLC
Project No. 712

References

1. General Electric Standard Application for Reactor Fuel (GESTAR II), NEDE-24011-P-A-15, and the US Supplement NEDE-24011-P-A-15-US, September 2005.
2. Letter from AC Thadani (USNRC) to JS Charnley (GE), Subject: Acceptance for Referencing of Amendment 22 to General Electric Licensing Topical Report NEDE-24011-P-A "General Electric Standard Application for Reactor Fuel" (TAC No. 71444), July 23, 1990, MFN 100-90.

Enclosures

1. NEDC-33270P, March 2007 - GNF Proprietary Information
2. NEDO-33270, March 2007 - Non-Proprietary Information
3. Affidavit for NEDC-33270P, dated March 13, 2007
4. NEDC-33292P, March 2007 - GNF Proprietary Information
5. NEDO-33292, March 2007 - Non-Proprietary Information
6. Affidavit for NEDC-33292P, dated March 13, 2007

cc: MC Honcharik, USNRC
PL Campbell, GE, Washington
RE Brown, GE/Wilmington
JF Harrison, GE/Wilmington
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JS Bowman, GE/Wilmington
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ENCLOSURE 1

FLN-2007-011

GNF2 Advantage Generic Compliance with NEDE-24011-P-A
(GESTAR II), NEDC-33270P, March 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 enclosure carries the notation “Global Nuclear Fuel Proprietary Information.” The GNF-A proprietary information is identified by [[a dotted underline inside double square brackets^{3}]]. 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.

ENCLOSURE 2

FLN-2007-011

**GNF2 Advantage Generic Compliance with NEDE-24011-P-A
(GESTAR II), NEDC-33270P, March 2007**

Non-Proprietary Information

IMPORTANT NOTICE

This is a non-proprietary version of Enclosure 1 to FLN-2007-011, 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-2007-011

**GNF2 Advantage Generic Compliance with NEDE-24011-P-A
(GESTAR II), NEDC-33270P, March 2007**

Affidavit

Global Nuclear Fuel–Americas, L.L.C

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, NEDC-33270P, *GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II)*, Class III (GNF Proprietary Information), dated March 2007. The GNF-A proprietary information is identified by [[a dotted underline inside double square brackets^{3}]]. 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, 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 cost or price information, production capacities, budget levels, or commercial strategies of GNF-A, its customers, or its suppliers;
- d. Information which reveals aspects of past, present, or future GNF-A customer-funded development plans and programs, of potential commercial value to GNF-A;
- e. 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 the 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. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in (6) and (7) following. 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.
- (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 fuel design and licensing methodology 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 or its licensor.

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 at Wilmington, North Carolina this 14th day of March 2007.



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

ENCLOSURE 4

FLN-2007-011

GEXL17 Correlation for GNF2 Fuel, NEDC-33292P, March 2007

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ENCLOSURE 5

FLN-2007-011

GEXL17 Correlation for GNF2 Fuel, NEDC-33292P, March 2007

Non-Proprietary Information

IMPORTANT NOTICE

This is a non-proprietary version of Enclosure 4 to FLN-2007-011, 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 6

FLN-2007-011

GEXL17 Correlation for GNF2 Fuel, NEDC-33292P, March 2007

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 - g. 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;

- h. Information which reveals cost or price information, production capacities, budget levels, or commercial strategies of GNF-A, its customers, or its suppliers;
- i. Information which reveals aspects of past, present, or future GNF-A customer-funded development plans and programs, of potential commercial value to GNF-A;
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Manager, Engineering
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