



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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FLN-2007-036
December 7, 2007

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

Subject: Proposed GESTAR II Amendment 31, Stability Analysis and SRLR Template Update

GNF hereby submits Amendment 31 to General Electric Standard Application for Reload Fuel (GESTAR II), NEDE-24011P-A. This amendment proposes to make changes to GESTAR II and its U.S. Supplement to incorporate updates to the Stability analysis sections and the SRLR template. This amendment also proposes several administrative changes. The following table summarizes the proposed changes:

Section(s)	Change Made
3.1.2, 3.2.2, and Table 3.1	Modified MLHGR to LHGR Operating Limit for consistency with terminology used in Section 2.
3.4.2.10	Added a new criteria section for the stability analysis.
4.3.1.2.8	Modified the text used in AOO transient power/flow conditions to use the EOR terminology instead of EOC to be more consistent with current terminology.
S.4	Modified the text to reflect that the stability analyses are now performed or confirmed on a cycle specific basis.
S.4.1.1 through S.4.1.4	Clarified that Enhanced Option I-A, Option II, Option I-D, and Option III were reviewed and approved by the USNRC for operation up to the MELLA domain.
S.4.1.5	Added a new section to include the reviewed and approved DSS-CD stability method.
S.4.2.2, S.4.2.3	Added 2 new sections on backup stability protection for Option III and DSS-CD
S.5.1.3	Clarified that the APRM Simulated Thermal Power Trip is standard equipment in some BWR/4s, and all BWR/5s and /6s.

DOG
MRR

Section(s)	Change Made
S.5.1.4	Modified the text used in AOO transient power/flow conditions to use the EOR terminology instead of EOC to be consistent with current terminology.
S.6	Added three new references: S-101: GE-NE-0000-0031-6498-R0, <i>Plant-Specific Core-wide Mode DIVOM Procedure Guideline</i> , June 2, 2005. S-102: GE-NE-0000-0028-9714-R1, <i>Plant-Specific Regional Mode DIVOM Procedure Guideline</i> , June 2, 2005. S-103: <i>General Electric Boiling Water Reactor Detect and Suppress Solution – Confirmation Density</i> , NEDC-33077P-A, Rev. 6, December 2007. (Soon to be Published)
US Supp. – App. A	Replaced SRLR template with current revision.

Reference 1 requests that a need date be specified in each submittal. Because Amendment 31 constitutes straightforward administrative changes and changes based on approved references, we believe that the NRC could complete their review within a four-month time frame, which would result in approval by the end of April 2008.

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 2 is a non-proprietary version.

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
 Vice President, Fuel Engineering
 Global Nuclear Fuel–Americas, LLC

Project No. 712

References

1. Letter to James F. Klapproth from Herbert N. Berkow, "Implementation of a Revised Review Process for Topical Reports," dated October 21, 2003.

Enclosures

1. Proposed GESTAR II Amendment 31 - Proprietary CD-ROM
2. Proposed GESTAR II Amendment 31 - Non-Proprietary CD-ROM
3. Affidavit, dated December 7, 2007

cc: MC Honcharik, USNRC
PL Campbell, GEH/Washington
RE Brown, GEH/Wilmington
JF Harrison, GEH/Wilmington
JF Klapproth, GEH/Wilmington
eDRF Section 0000-0078-1946

ENCLOSURE 1 (CD ROM)

FLN-2007-036

Proposed GESTAR II Amendment 31

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 “GNF Proprietary Information.” The GNF-A proprietary information is identified by a single [[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 (CD ROM)

FLN-2007-036

Proposed GESTAR II Amendment 31

Non-Proprietary Information

IMPORTANT NOTICE

This is a non-proprietary version of Enclosure 1, 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-2007-036

Affidavit

Global Nuclear Fuel – Americas
AFFIDAVIT

I, Jens G. M. Andersen, state as follows:

- (1) I am Consulting Engineer, Thermal Hydraulic Methods, 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 Enclosure 1 of FLN-2007-036, Andrew A. Lingenfelter (GNF) to Document Control Desk (USNRC), *Proposed GESTAR II Amendment 31, Stability Analysis and SRLR Template Update*, Dated December 7, 2007. The proprietary information in Enclosure 1, *Proposed GESTAR II Amendment 31*, is identified by a single [[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 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 and commercial or financial information obtained from a person and privileged or confidential” (Exemption 4). The material for which exemption from disclosure is here sought is all “confidential commercial information,” and some portions 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, of potential commercial value 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 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. 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.