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Enclosure 2 contains Proprietary information - Withhold under 10 CFR 2.390. Upon removal of Enclosure 2, this document is decontrolled.

March 28, 2014

Docket Nos.: 50-321



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

Edwin I. Hatch Nuclear Plant – Unit 1
Cycle 27 Core Operating Limits Report,
Information Letter on NSF Channel Lead Test Assemblies (LTAs), and
Information Letter on GNF-Ziron Cladding Material and Water Rod Material LTAs

Ladies and Gentlemen:

In accordance with Technical Specification 5.6.5.d., Southern Nuclear Operating Company (SNC) submits the enclosed Core Operating Limits Report (COLR), Version 1 for Edwin I. Hatch Nuclear Plant (HNP) Unit 1 Cycle 27.

The enclosed documentation contains proprietary information as defined by 10 CFR 2.390. Global Nuclear Fuel (GNF), as the owner of the proprietary information, has executed the enclosed affidavit, which identifies that the enclosed proprietary information has been handled and classified as proprietary, is customarily held in confidence, and has been withheld from public disclosure. The proprietary information was provided to SNC in a GNF transmittal that is referenced by the affidavit. The proprietary information has been faithfully reproduced in the enclosed documentation, such that, the affidavit remains applicable. This affidavit is provided in Enclosure 1 to this letter. GNF hereby requests that the enclosed proprietary information provided in Enclosure 2 to this letter be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. A non-proprietary version of the Hatch 1 Cycle 27 COLR is provided as Enclosure 3.

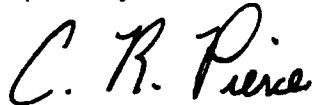
In addition to the COLR, SNC is required to provide an information letter to the NRC describing the lead test assembly (LTA) program per Section 1.2.1.b. of GESTAR-II. Specifically, the agreed content includes a description of the LTAs, a statement concerning the applicability of NRC-approved methods, a description of the objectives of the LTA program, and an outline of the kinds of measurements that will be made on the LTAs. Enclosure 4 provides this information letter for the eight LTAs loaded in Cycle 27 that contain standard GE14 components and fuel with the exception of the channels. The channels were manufactured with a distortion-resistant material known as NSF. The term NSF reflects the presence of Niobium (Nb), Tin (Sn) and Iron (Fe) as the primary alloying metals combined with Zirconium. The surface condition of these NSF channels has been modified compared to the previous NSF channels irradiated in Hatch 2. The NSF channels inserted in Hatch 1 Cycle 27 have a pre-oxidized

AD001
LRR

channels has been modified compared to the previous NSF channels irradiated in Hatch 2. The NSF channels inserted in Hatch 1 Cycle 27 have a pre-oxidized surface condition similar to the pre-oxidized surface condition that was standard on Zircaloy-4 channels prior to 1990. Enclosure 5 provides this information letter for an LTA loaded in Cycle 27 that is a standard GE14 fuel assembly with the exception of the GNF-Ziron cladding material and water rod material. GNF-Ziron is a zirconium-based alloy with composition very similar to the industry standard Zircaloy-2 but with increased iron content.

This letter contains no NRC commitments. If you have any questions, please contact Ken McElroy at (205) 992-7369.

Respectfully submitted,



C. R. Pierce
Regulatory Affairs Director

CRP/RMJ/lac

- Enclosures:
1. Global Nuclear Fuel – Americas Affidavit
 2. HNP Unit 1 Cycle 27 Version 1 Core Operating Limits Report
PROPRIETARY INFORMATION
 3. HNP Unit 1 Cycle 27 Version 1 Core Operating Limits Report
NON-PROPRIETARY INFORMATION
 4. LTA Information Letter Eight NSF Channel Assemblies
 5. LTA Information Letter GNF-Ziron Cladding Material and
Water Rod Material Assembly

cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Mr. D. R. Vineyard, Vice President – Hatch
Mr. B. L. Ivey, Vice President – Regulatory Affairs
Mr. D. R. Madison, Vice President – Fleet Operations
Mr. B. J. Adams, Vice President - Engineering
RTYPE: CHA02.004

U. S. Nuclear Regulatory Commission
Mr. V. M. McCree, Regional Administrator
Mr. R. E. Martin, NRR Senior Project Manager - Hatch
Mr. E. D. Morris, Senior Resident Inspector – Hatch

Edwin I. Hatch Nuclear Plant – Unit 1
Cycle 27 Core Operating Limits Report,
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Enclosure 1

Global Nuclear Fuel – Americas Affidavit

Global Nuclear Fuel – Americas

AFFIDAVIT

I, Lukas Trosman, state as follows:

- (1) I am Engineering Manager, Reload Design and Analysis, Global Nuclear Fuel – Americas, LLC (“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 GNF’s letter, VSP-SNC-GEN-14-006, Vickie S. Perry to Susan Hoxie-Key (Southern Nuclear Operating Company), entitled “Edwin I. Hatch Nuclear Plant Unit 1 Cycle 27 Core Operating Limits Report (COLR),” January 29, 2014. GNF proprietary information in Enclosure 1, which is entitled “Edwin I. Hatch Nuclear Plant Unit 1 Cycle 27 Core Operating Limits Report,” is identified by a dotted underline inside double square brackets. [[This sentence is an example.^{3}]] A “[[” marking at the beginning of a table, figure, or paragraph closed with a “]]” marking at the end of the table, figure or paragraph is used to indicate that the entire content between the double brackets is proprietary. 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.
- (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 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.

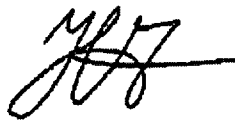
The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

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 29th day of January 2014.



Lukas Trosman
Engineering Manager, Reload Design and Analysis
Global Nuclear Fuel – Americas, LLC