

PROPRIETARY INFORMATION – WITHHOLD UNDER 10 CFR 2.390

10 CFR 50.90

March 17, 2011

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

Limerick Generating Station, Unit 2
Facility Operating License No. NPF-85
NRC Docket No. 50-353

Subject: Response to Request for Additional Information Concerning the Safety Limit
Minimum Critical Power Ratio Change License Amendment Request

- References:
- 1) Letter from P. B. Cowan (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "License Amendment Request - Safety Limit Minimum Critical Power Ratio Change," dated December 15, 2010
 - 2) Letter from P. Bamford (U.S. Nuclear Regulatory Commission) to M. J. Pacilio (Exelon Generation Company, LLC), "Limerick Generating Station, Unit 2 – Request for Additional Information Regarding Proposed Technical Specification Safety Limit Minimum Critical Power Ratio Changes (TAC NO. ME5182)," dated February 4, 2011
 - 3) Letter from D. P. Helker (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Concerning the Safety Limit Minimum Critical Power Ratio Change License Amendment Request," dated February 17, 2011

In the Reference 1 letter, Exelon Generation Company, LLC (Exelon) requested a proposed change to modify Technical Specification (TS) 2.1 ("Safety Limits"). Specifically, this change incorporates revised Safety Limit Minimum Critical Power Ratios (SLMCPRs) due to the cycle specific analysis performed by Global Nuclear Fuel for Limerick Generating Station (LGS), Unit 2, Cycle 12.

In a telephone conversation on Friday, March 11, 2011, the U.S. Nuclear Regulatory Commission Staff requested additional information. Attached is our response to this request.

**Attachment 1 transmitted herewith contains Proprietary Information.
When separated from attachments, this document is decontrolled.**

U.S. Nuclear Regulatory Commission
Response to Request for Additional Information
Concerning the Safety Limit Minimum Critical Power
Ratio Change License Amendment Request
March 17, 2011
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Attachment 1 (letter from C. F. Lamb (Global Nuclear Fuel) to J. Tusar (Exelon Generation Company, LLC), dated March 16, 2011) contains information proprietary to Global Nuclear Fuel. Global Nuclear Fuel requests that the document be withheld from public disclosure in accordance with 10 CFR 2.390(b)(4). Attachment 2 contains a non-proprietary version of the Global Nuclear Fuel document. An affidavit supporting this request is also contained in Attachment 2.

Should you have any questions concerning this letter, please contact Tom Loomis at (610) 765-5510.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 17th day of March 2011.

Respectfully,



David P. Helker
Manager, Licensing & Regulatory Affairs
Exelon Generation Company, LLC

Attachments: 1) Proprietary Version of Global Nuclear Fuel Letter
2) Non-Proprietary Version of Global Nuclear Fuel Letter and Affidavit

cc: USNRC Region I, Regional Administrator
USNRC Senior Resident Inspector, LGS
USNRC Project Manager, LGS
R. R. Janati, Commonwealth of Pennsylvania

ATTACHMENT 2

Non-Proprietary Version of Global Nuclear Fuel Letter and Affidavit

ENCLOSURE 2

CFL-EXN-HH2-11-012

Clarification to NRC RAI-04 for Limerick Generating Station Unit 2
SLMCPR Submittal

Non-Proprietary Information – Class I (Public)

INFORMATION NOTICE

This is a non-proprietary version of CFL-EXN-HH2-11-012 Enclosure 1, which has the proprietary information removed. Portions of the document that have been removed are indicated by white space inside open and closed bracket as shown here [[]].

REQUEST FOR ADDITIONAL INFORMATION

LIMERICK GENERATING STATION, UNIT 2

LICENSE AMENDMENT REQUEST REGARDING SAFETY LIMIT MINIMUM

CRITICAL POWER RATIO CHANGE

DOCKET NO. 50-353

The response to RAI-04 presented in Reference 1 contained a typographical error. The value of c contained an extra decimal point and was indicated to be [[]]. The correct value in reference to Limerick Generating Station, Unit 2 is [[]].

The values of c and d presented in the response to RAI-04 in Reference 1 are based on the uncertainties used in the Safety Limit Minimum Critical Power Ratio (SLMCPR) Monte-Carlo analysis. There are 2 uncertainty models that GNF-A uses in calculations; these are the GETAB Model and Uncertainties and the Revised Model and Uncertainties. Limerick Generating Station, Unit 2 uses the Revised Model and Uncertainties, which uses the values of [[]]. The GETAB Model and Uncertainties uses the values [[]].

Reference: 1) Letter, D. P. Helker (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Concerning the Safety Limit Minimum Critical Power Ratio Change License Amendment Request," February 17, 2011.

ENCLOSURE 3

CFL-EXN-HH2-11-012

Affidavit

Global Nuclear Fuel – Americas

AFFIDAVIT

I, **Russell E. Stachowski**, state as follows:

- (1) I am Chief Consulting Engineer, Nuclear Physics, 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, CFL-EXN-HH2-11-012, C. Lamb (GNF-A) to J. Tusar (Exelon Nuclear), entitled “GNF Clarification to NRC RAI-04 for Limerick Generating Station Unit 2 SLMCPR Submittal,” dated March 16, 2011. GNF-A proprietary information in Enclosure 1, which is entitled “Clarification to NRC RAI-04 for Limerick Generating Station Unit 2 SLMCPR Submittal,” is identified by a dotted underline inside double square brackets. [[This sentence is an example.¹³¹]] 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 ¹³¹ 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 this methodology, along with the testing, development and approval was achieved at a significant cost to GNF-A or its licensor.

The development of the fuel design and licensing methodology along with the interpretation and application of the analytical results is derived from an extensive experience database that constitutes a major GNF-A asset.

- (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 at Wilmington, North Carolina this 15th day of March 2011.



Russell E. Stachowski
Chief Consulting Engineer, Nuclear Physics
Global Nuclear Fuel - Americas, LLC