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July 25, 2002

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

Limerick Generating Station, Unit 1
Facility Operating License No. NPF-39
NRC Docket No. 50-352

Subject: Limerick Generating Station Unit 1 Cycle 9 Channel Bow Assessment

Dear Sir/Madam:

This letter is being sent in response to an NRC request for information as discussed via teleconference on June 20, 2002. The purpose of the teleconference was to discuss the Limerick Generating Station (LGS) Unit 1 Cycle 9 channel bow condition discovered during the LGS Unit 1 Spring 2002 Refueling Outage. At the conclusion of the teleconference, NRC requested that Exelon provide a written assessment of the subject fuel channel bow condition.

Attachment 1 provides the requested information. Attachment 1 contains information proprietary to Global Nuclear Fuel. Global Nuclear Fuel requests that the document be withheld from public disclosure in accordance with 10 CFR 2.790(a)(4). An affidavit supporting this request is provided in Attachment 2. Attachment 3 contains a non-proprietary version of the Global Nuclear Fuel document.

Additionally, there are no commitments contained within this letter.

If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,



Michael P. Gallagher
Director, Licensing & Regulatory Affairs
Mid-Atlantic Regional Operating Group

Attachments: 1- Limerick Unit 1 Cycle 9 Channel Bow Assessment (PROPRIETARY)
2- Global Nuclear Fuel Affidavit
3- Limerick Unit 1 Cycle 9 Channel Bow Assessment (Non-Proprietary version)

cc: H. J. Miller, Administrator, Region I, USNRC
A. L. Burritt, USNRC Senior Resident Inspector, LGS
J. P. Boska, Senior Project Manager, USNRC

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ATTACHMENT 2

LIMERICK GENERATING STATION
UNIT 1

DOCKET NO. 50-352

LICENSE NO. NPF-39

Global Nuclear Fuel Affidavit



Global Nuclear Fuel

A Joint Venture of GE, Toshiba, & Hitachi

Affidavit

I, Jens G. Andersen, state as follows:

- (1) I am Fellow, and Project Manager, TRACG Development, 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 attachment, “Limerick Unit 1 Cycle 9 Fuel Channel Bow Assessment”, July 16, 2002.
- (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 2.790(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 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, (4)b, (4)d, and (4)e, above.

- (5) 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, in part, because it contains details of GNF-A's fuel design, technology, and evaluation 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, in excess of one 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 evaluation methodology is part of GNF-A's comprehensive BWR 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 evaluations utilizing the GNF technology bases and methods.

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

Affidavit

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, verify, or revise 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, or utilize the information to otherwise affect the GNF-A competitive advantage.

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, and technology base.

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 17 day of July, 2002.



Jens G. Andersen
Global Nuclear Fuel – Americas, LLC

ATTACHMENT 3

LIMERICK GENERATING STATION
UNIT 1

DOCKET NO. 50-352

LICENSE NO. NPF-39

Limerick Unit 1 Cycle 9 Channel Bow Assessment

(Non-Proprietary version)



Limerick Unit 1 Cycle 9

Introduction

During the Limerick Unit 1 end-of-cycle 9 shutdown on March 4, 2002, degraded scram time response was observed in two symmetric control cells (54-31, 30-55). Additionally, slow-to-settle or no-settle conditions were observed in the other two symmetric control cells (06-31, 30-07). Figure 1 shows the core locations of the symmetric cells. The maximum scram time observed to notch position 5 was 5.6 seconds for control cell 54-31. This was a degradation of 3.2 seconds from the previous scram time test of this rod on September 16, 2000. The core average scram time to notch position 5 throughout Cycle 9 was 2.35 seconds.

Figure 1. Limerick 1 Cycle 9 Core Locations

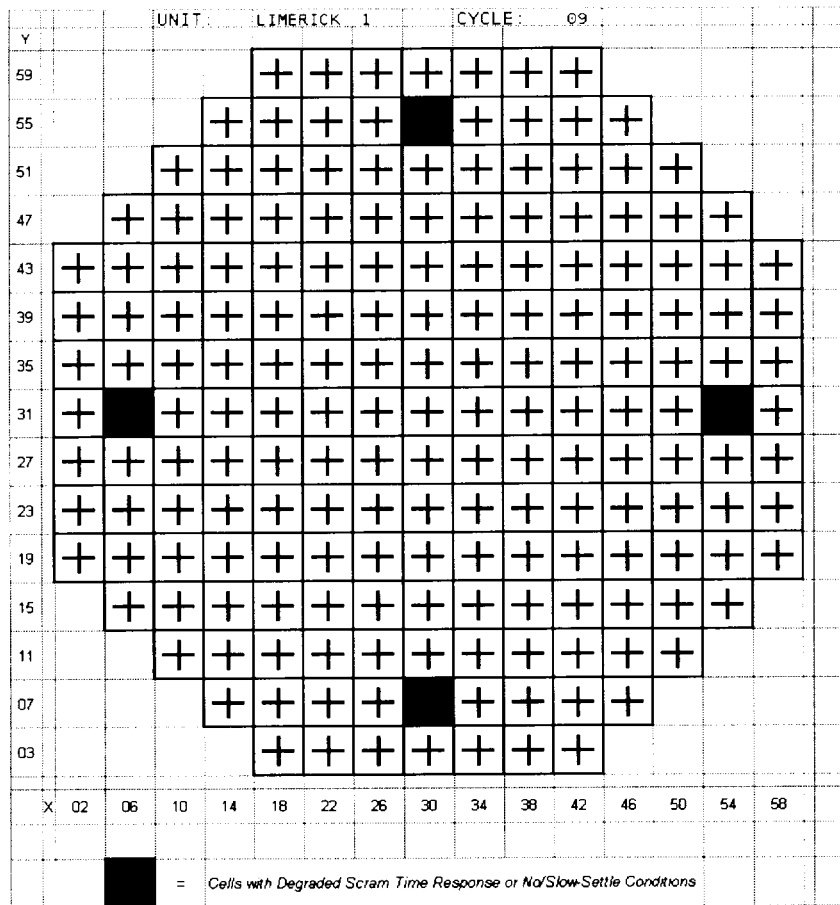


Figure 2. Fuel Channel Side Representation



Monitoring Plan

A Monitoring Plan has been developed and implemented at Limerick Generating Station and Peach Bottom Atomic Power Station. “Susceptible” control cells have been identified in the current operating cycles and scram time testing is on-going under the monitoring plan. To date, a total of 14 susceptible cells have been scram time tested at Limerick Unit 2 and 16 susceptible cells have been tested at Peach Bottom Units 2 & 3. No degraded scram time performance has been observed.