



John S. Keenan
Vice President
Brunswick Nuclear Plant

MAR 05 2002

SERIAL: BSEP 02-0051
TSC-2001-11

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 1
DOCKET NO. 50-325/LICENSE NO. DPR-71
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION - REQUEST FOR
LICENSE AMENDMENT REGARDING REVISION OF MINIMUM CRITICAL
POWER RATIO SAFETY LIMIT VALUES (NRC TAC NO. MB2952)

Ladies and Gentlemen:

On September 18, 2001 (Serial: BSEP 01-0104), Carolina Power & Light (CP&L) Company submitted a license amendment application to revise the Technical Specifications for the Brunswick Steam Electric Plant (BSEP), Unit 1. The license amendment application proposes revisions to the Minimum Critical Power Ratio (MCPR) Safety Limit values for single and two recirculation loop operation. Subsequently, on February 20, 2002, the NRC provided an electronic version of a Request For Additional Information (RAI) concerning the impact of recently identified GEXL14 discrepancies on the MCPR Safety Limit calculation for BSEP Unit 1.

Enclosure 1 provides the requested information regarding the GEXL14 correlation analysis and its impact on the MCPR Safety Limit calculation for BSEP, Unit 1. The information in Enclosure 1 was provided by Global Nuclear Fuel; this information is considered to be proprietary to Global Nuclear Fuel and should be withheld from public disclosure in accordance with 10 CFR 9.17(a)(4) and 10 CFR 2.790(a)(4). An affidavit attesting to this fact is provided in Enclosure 2. A non-proprietary version of the Global Nuclear Fuel information is provided in Enclosure 3.

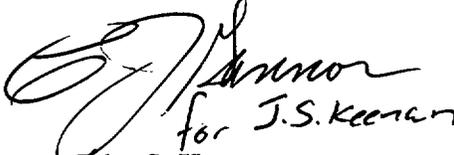
P.O. Box 10429
Southport, NC 28461

T > 910.457.2496
F > 910.457.2803

AP01

Please refer any questions regarding this submittal to Mr. David C. DiCello, Manager - Regulatory Affairs, at (910) 457-2235.

Sincerely,

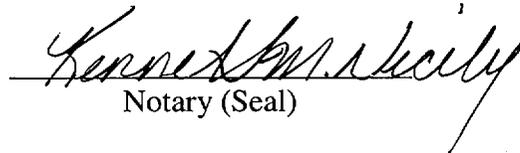

for J.S. Keenan
John S. Keenan

WRM/wrm

Enclosures:

1. Global Nuclear Fuel - Americas, LLC Document Entitled "Request/Responses for Additional Information to Support Tech Spec SLMCPR, Brunswick Unit 1, Cycle 14" (**Proprietary Information**)
2. Global Nuclear Fuel - Americas, LLC Affidavit Regarding Withholding From Public Disclosure
3. Global Nuclear Fuel - Americas, LLC Document Entitled "Request/Responses for Additional Information to Support Tech Spec SLMCPR, Brunswick Unit 1, Cycle 14" (**Non-Proprietary Information**)

C. J. Gannon, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, and agents of Carolina Power & Light Company.


Notary (Seal)

My commission expires: MAY 18, 2003

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cc (with Enclosures 1, 2, and 3):

U. S. Nuclear Regulatory Commission, Region II
ATTN: Mr. Luis A. Reyes, Regional Administrator
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303-8931

U. S. Nuclear Regulatory Commission
ATTN: Mr. Theodore A. Easlick, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission **(Electronic Copy Only)**
ATTN: Mr. Allen G. Hansen (Mail Stop OWFN 8G9)
11555 Rockville Pike
Rockville, MD 20852-2738

cc (without Enclosure 1):

Ms. Jo A. Sanford
Chair - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

Mr. Mel Fry
Director - Division of Radiation Protection
North Carolina Department of Environment and Natural Resources
3825 Barrett Drive
Raleigh, NC 27609-7221

ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 1
DOCKET NO. 50-325/LICENSE NO. DPR-71
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION -
REQUEST FOR LICENSE AMENDMENT REGARDING
REVISION OF MINIMUM CRITICAL POWER RATIO SAFETY LIMIT VALUES
(NRC TAC NO. MB2952)

Global Nuclear Fuel - Americas, LLC Affidavit
Regarding Withholding From Public Disclosure



Global Nuclear Fuel

A Joint Venture of GE, Toshiba, & Hitachi

Affidavit

I, Glen A. Watford, being duly sworn, depose and state as follows:

- (1) I am Manager, Fuel Engineering Services, 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, “Request/Responses for Additional Information to Support Tech Spec SLMCPR Brunswick Unit 1, Cycle 14,” March 5, 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. and (4)b., 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 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.

Affidavit

State of North Carolina)
County of New Hanover) SS:

Glen A. Watford, being duly sworn, deposes and says:

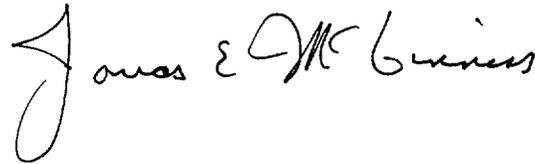
That he has read the foregoing affidavit and the matters stated therein are true and correct to the best of his knowledge, information, and belief.

Executed at Wilmington, North Carolina, this 5th day of March, 2002



Glen A. Watford
Global Nuclear Fuel – Americas, LLC

Subscribed and sworn before me this 5 day of MARCH, 2002



Notary Public, State of North Carolina

JAMES E. MCGINNESS
Notary Public, State of North Carolina
New Hanover County

My Commission Expires _____

My Commission Expires 1/23/2006

ENCLOSURE 3

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 1
DOCKET NO. 50-325/LICENSE NO. DPR-71
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION -
REQUEST FOR LICENSE AMENDMENT REGARDING
REVISION OF MINIMUM CRITICAL POWER RATIO SAFETY LIMIT VALUES
(NRC TAC NO. MB2952)

Global Nuclear Fuel - Americas, LLC
Document Entitled "Request/Responses for
Additional Information to Support
Tech Spec SLMCPR, Brunswick Unit 1, Cycle 14"
(Non-Proprietary Information)

REQUEST FOR ADDITIONAL INFORMATION
(response has been imbedded)
RELATING TO PROPOSED AMENDMENT TO LICENSE NO. DPR-71
CAROLINA POWER & LIGHT COMPANY
BRUNSWICK UNIT NO. 1
DOCKET NO. 50-325

The Nuclear Regulatory Commission (NRC) staff has reviewed the September 18, 2001, Carolina Power & Light (CP&L) Company submittal regarding changes to the Brunswick Steam Electric Plant, Unit No. 1 Safety Limit Minimum Critical Power Ratios (SLMCPR) values and has requested the following information:

1. The NRC staff identified discrepancies in the GEXL14 data bases while conducting an audit of General Electric's GEXL14 correlation analysis. Provide justification that the overall GEXL14 uncertainty is still valid and discuss the impact of these discrepancies on the SLMCPR calculation for Brunswick Unit 1 Cycle 14 operation.

RESPONSE:

In a meeting with the NRC staff on February 11, 2002 (Reference 1) [[

]] To evaluate the impact on SLMCPR, the process described in Reference 1 was applied to Brunswick Unit 1, Cycle 14. The results are shown in Table 1.

TABLE 1						
Net Adjustment to SLMCPR		Dual Loop Ops.			Single Loop Ops.	
[[BOC	MOC	EOC	BOC	EOC
	Submitted SLMCPR	1.12	1.12	1.12	1.14	1.14
Step*	Calculated M/C SLMCPR	[[]]
1	Margin to Submitted SLMCPR	[[]]
2,3	[[]]
4	Credit for Reduced Power Distribution Uncertainties	[[]]
	[[]]
	Net unrounded change	[[]]
	Adjusted SLMCPR with rounding	1.12	1.09	1.12	1.13	1.14
Revised SLMCPR for Tech Specs		1.12			1.14	
* Step 5 credit applies only for OLMCPR and is not relevant for Tech Specs under review.						

No SLMCPR penalty was assessed [[]] for Brunswick Unit 1, Cycle 14 because the following process revealed that such a penalty is not applicable. [[

Unit 1, Cycle 14, [[]] For Brunswick
]] the SLMCPR penalty does not apply. The details for the cycle-specific assessment
that was performed for Brunswick Unit 1, Cycle 14 are documented in Reference 2.

[[

]]

Therefore, as indicated in Table 1, no change is needed in the requested values for the Single Loop Operation (SLO) and Dual Loop Operation (DLO) Technical Specification SLMCPRs for Brunswick Unit 1, Cycle 14.

Reference 1: G.A. Watford (GNF) letter J.E. Donohue (NRC), Final Presentation Material for GEXL Presentation - February 11, 2002; FLN-2002-004; February 12, 2002.

Reference 2: GNF-A design record file (DRF) J11-03936-05 titled "Brunswick-1 Reload 13 / Cycle 14 – Safety Limit MCPR (SLMCPR)"

Reference 3: *Methodology and Uncertainties for Safety Limit MCPR Evaluations*, NEDC-32601P-A, August 1999.