



## Nebraska Public Power District

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NLS2007085  
December 20, 2007

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

Subject: Response to Request for Additional Information Regarding License Amendment  
Request to Revise Technical Specifications - Safety Limit Minimum Critical Power  
Ratio  
Cooper Nuclear Station, Docket No. 50-298, DPR-46

- References:
1. Electronic correspondence from Carl F. Lyon, U.S. Nuclear Regulatory Commission, to Ronald E. Rogers, Nebraska Public Power District, dated December 6, 2007, "RAI for Cooper SLMCPR LAR (TAC No. MD6579)"
  2. Letter from Stewart B. Minahan, Nebraska Public Power District, to the U.S. Nuclear Regulatory Commission, dated August 10, 2007, "License Amendment Request to Revise Technical Specifications - Safety Limit Minimum Critical Power Ratio"

Dear Sir or Madam:

The purpose of this letter is for the Nebraska Public Power District (NPPD) to submit a response to the Nuclear Regulatory Commission (NRC) Request for Additional Information (RAI) sent electronically on December 6, 2007 (Reference 1). The additional information requested is to support NRC review of the license amendment request (LAR) to revise the Cooper Nuclear Station (CNS) Technical Specifications Safety Limit Minimum Critical Power Ratio value. This LAR was submitted by NPPD letter dated August 10, 2007 (Reference 2) and was discussed during a teleconference between NRC and NPPD staff on December 5, 2007.

Attachment 1 contains a response to the first NRC RAI item. The response to the remainder of the NRC RAI items is provided by Enclosure 1 and contains information considered proprietary to Global Nuclear Fuel (GNF) as defined by 10 CFR 2.390. The proprietary information is indicated by dotted underline inside double square brackets. Enclosure 1 is requested to be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. Enclosure 2 is the non-proprietary version of the response provided by GNF and is suitable for public disclosure. Enclosure 3 is the affidavit executed by GNF as the owner of the proprietary information. The affidavit identifies that the proprietary information provided in Enclosure 1 has been handled and classified as proprietary, is customarily held in confidence, and has been withheld from public disclosure.

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The information submitted by this RAI response does not change the evaluation of the No Significant Hazards Consideration submitted by the Reference 2 letter.

Should you have any questions regarding this submittal, please contact David Van Der Kamp, Licensing Manager, at (402) 825-2904.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 12-20-07

Sincerely,



Michael J. Colomb  
Acting Vice President-Nuclear and  
Chief Nuclear Officer

/bk

Attachment

Enclosures

cc: Regional Administrator w/ attachment and enclosures  
USNRC - Region IV

Cooper Project Manager w/ attachment and enclosures  
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/ attachment and enclosures  
USNRC - CNS

Nebraska Health and Human Services w/ attachment and enclosures  
Department of Regulation and Licensure

NPG Distribution w/o attachment and enclosures

CNS Records w/ attachment and enclosures

**Attachment 1**

**Response to Request for Additional Information (RAI) Regarding  
License Amendment Request (LAR) to Revise Technical Specifications Safety Limit  
Minimum Critical Power Ratio (SLMCPR)**

**Cooper Nuclear Station (CNS), Docket No. 50-298, DPR-46**

1. Nuclear Regulatory Commission (NRC) Request

*Please describe how the Gardel uncertainties are used in computing the CNS SLMCPR.*

NPPD Response

The GARDEL bundle power uncertainties are not used in the CNS SLMCPR calculation. The CNS SLMCPR calculation uses the previously NRC approved uncertainties as documented in NEDO-10958-A, "General Electric BWR Thermal Analysis Basis (GETAB): Data, Correlation and Design Application," January 1977. Credit is not taken for the lower GARDEL uncertainties for the CNS SLMCPR calculation.

The GARDEL bundle power uncertainties report (Studsvik Scandpower Report SSP-07/405-C, "GARDEL BWR Cooper Nuclear Station Power Distribution Uncertainties," Revision 1, May 11, 2007) included in the Reference 2 letter demonstrates that the GARDEL uncertainties bound the GETAB uncertainties. This is demonstrated by comparing the value of the GARDEL radial bundle power uncertainty (sigma radial from SSP-07/405-C) to the value of the GETAB effective total bundle power uncertainty (NEDO-10958-A) and comparing the value of the GARDEL nodal power uncertainty (sigma nodal from SSP-07/405-C) to the value of the GETAB effective overall quarter segment power uncertainty (NEDO-10958-A).

The GARDEL reported bundle power uncertainty value is 2.3% as compared to the GETAB value of 4.3%, and the GARDEL reported nodal power uncertainty is 4.0% as compared to the GETAB value of 8.7%. Both of these values show lower uncertainty which bounds the GETAB values used in the Global Nuclear Fuel (GNF) SLMCPR calculations.

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**Enclosure 3**

**Global Nuclear Fuel - Americas Affidavit Requesting Withholding of  
Proprietary Information Pursuant to 10 CFR 2.390**

## Global Nuclear Fuel – Americas

### AFFIDAVIT

I, **Andrew A. Lingenfelter**, state as follows:

- (1) I am Vice President, Fuel Engineering, 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 the enclosure, "NRC Requests for Additional Information for Cooper Cycle 24 SLMCPR Technical Specification Change Letter," December 13, 2007. GNF proprietary information is identified by a dotted underline inside double square brackets. [[This sentence is an example.<sup>(3)</sup>]] In each case, the superscript notation <sup>(3)</sup> 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 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 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.

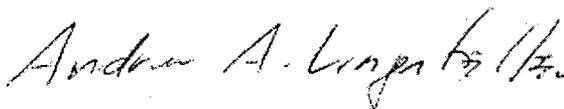
The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

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 14<sup>th</sup> day of December 2007.



Andrew A. Lingenfelter  
Vice President, Fuel Engineering  
Global Nuclear Fuel – Americas, LLC

ATTACHMENT 3 LIST OF REGULATORY COMMITMENTS©

ATTACHMENT 3 LIST OF REGULATORY COMMITMENTS©

Correspondence Number: NLS2007085

The following table identifies those actions committed to by Nebraska Public Power District (NPPD) in this document. Any other actions discussed in the submittal represent intended or planned actions by NPPD. They are described for information only and are not regulatory commitments. Please notify the Licensing Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITMENT NUMBER	COMMITTED DATE OR OUTAGE
None		