



James F. Klapproth
Manager, Engineering and Technology

*Nuclear Services
General Electric Company
175 Curtner Avenue, MC 706, San Jose, CA 95125-1688
408 525-5434, Fax: 408 525-3837
james.klapproth@gen.ge.com*

MFN 01-023

June 1, 2001

US Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Attention: Chief, Information Management Branch
Program Management
Policy Development and Analysis Staff

Subject: **Response to Request for Additional Information--
GE Nuclear Energy Licensing Topical Report NEDC-32983P
RAI#'s: 1 through 8**

As requested in Reference 1, this letter provides, as an attachment, the responses to an additional Request for Additional Information (RAI-3) associated with the NRC Staff's review of GE Nuclear Energy LTR NEDC-32983P (Reference 2). Attachment 1 provides specific responses to the eight additional RAIs identified in Reference 1. Previous letters have provided responses to the first round RAIs (See References 3, 4, and 5) and to the second round RAIs (Reference 6 and 7).

GE has now provided a response to each of the nineteen first round RAIs and to each of the ten second round RAIs, as well as the eight additional RAIs (RAI-3). With the completion of this third set of responses, GE believes that the NRC has sufficient information to complete its review and provide an SER by July 2001. In support of that schedule, GE offers to review the draft SER for proprietary content, on an expedited basis.

In response to Reference 1, GE revised its previous submittal of the calculation bias and uncertainty assessment of GE flux evaluation methodology. This revision took full advantage of all historical plant data. Although statistically sound, this approach resulted in

T007

a bias with an uncertainty in the bias being larger than the bias itself. The NRC Staff viewed this result as not acceptable. The results were discussed, during a conference call, with the Staff on April 20, 2001.

To address the NRC Staff's concern, GE has sought to increase the source data set by taking full advantage of individual wire measurements and the inclusion of data from the In-Reactor Irradiation Monitoring (IRIM) experiment. This increased data set is now the basis for the calculational bias assessment presented in this set of responses (i.e., RAI-3).

GE believes the attached responses meet the spirit of the technical discussion of 4/20/01. However, to facilitate understanding of the responses and the resolution of the NRC staff's review of the additional RAI responses, GE requests a conference call with the NRC staff, before 6/8/01, to facilitate resolution of the review.

Please note that the attachment contains proprietary information of the type that GE maintains in confidence and withholds from public disclosure. The information has been handled and classified as proprietary to GE as indicated in the attached affidavit. GE hereby requests that this information be withheld from public disclosure in accordance with the provisions of 10CFR2.790.

Sincerely,



J. F. Klapproth, Manager
Engineering and Technology
GE Nuclear Energy
(408) 925-5434
james.klapproth@gene.ge.com

Attachments:

- Affidavit by George B. Stramback, dated June 1, 2001 (4 pages)
- GE response to 4/27/01 RAI's (18 pages)

cc:

R. M. Pulsifer	(NRC)	w/	attachments
G. S. Shukla	(NRC)	w/o	attachments
M. A. Mitchell	(NRC)	w/o	attachments
L. Lois	(NRC)	w/o	attachments
C. E. Carpenter	(NRC)	w/o	attachments
K. E. Wichman	(NRC)	w/o	attachments
R. S. Drury	(GE)	w/	attachments

REFERENCE LIST

- 1.) US NRC Letter, R. Pulisfer (G. S. Shukla) to J. F. Klapproth (GE), dated April 27, 2000: Request for Additional Information – Topical Report NEDC-32983P, **General Electric Methodology for Reactor Pressure Vessel Fast Neutron Fluence Evaluations.**
- 2.) MFN 00-035, Submittal of GE Proprietary Document NEDC-32983P, **General Electric Methodology for Reactor Pressure Vessel Fast Neutron Flux Evaluations**, September 1, 2000.
- 3.) MFN 01-003, **Completion of Responses to Request for Additional Information – GE Nuclear Energy Licensing Topical Report NEDC-32983P RAI#'s: 6, 9, 10, 14, 17, 18, and 19**, January 17, 2001.
- 4.) MFN 01-001, **Partial Response to Request for Additional Information-GE Nuclear Energy Licensing Topical Report NEDC-32983P–Question # 11**, January 5, 2001.
- 5.) MFN 00-054, **Partial Response to Request for Additional Information-GE Nuclear Energy Licensing Topical Report NEDC-32983P**, December 20, 2000.
- 6.) MFN 01-009, **Partial Response to Request for Additional Information (Round Two)-GE Nuclear Energy Licensing Topical Report NEDC-32983P**, March 14, 2001.
- 7.) MFN 01-006, **Partial Response to Request for Additional Information (Round Two)-GE Nuclear Energy Licensing Topical Report NEDC-32983P**, March 2, 2001.

General Electric Company

AFFIDAVIT

I, **George B. Stramback**, being duly sworn, depose and state as follows:

- (1) I am Project Manager, Regulatory Services, General Electric Company ("GE") 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 Attachments to GE letter MFN 01-023, J. F. Klapproth to NRC, *Response to Request for Additional Information – GE Nuclear Energy Licensing Topical Report NEDC-32983P, RAI#'s: 1 through 8*, dated June 1, 2001. For pages containing proprietary information, the page is marked with "GE Proprietary Information" at the top of the specific page. The proprietary information is delineated by side-bars marked in the margin adjacent to the specific material in the attachments: *Attachment to MFN 01-023, Response to Round Three RAIs – Addressing Request for Additional Information Topical Report NEDC-32983P, General Electric Methodology for Reactor Pressure Vessel Fast Neutron Fluence Evaluations*
- (3) In making this application for withholding of proprietary information of which it is the owner, GE 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), 2.790(a)(4), and 2.790(d)(1) 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 General Electric's competitors without license from General Electric 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 General Electric, its customers, or its suppliers;
- d. Information which reveals aspects of past, present, or future General Electric customer-funded development plans and programs, of potential commercial value to General Electric;
- 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 both 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 GE, 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 GE, 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. Access to such documents within GE 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 GE 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), above, is classified as proprietary because it contains responses containing or based on detailed results of analytical models, methods and processes, including computer code extension, which GE has

developed, and applied to perform fast neutron flux calculations associated with BWR reactor pressure vessel evaluations.

The development and approval of the various computer codes associated with the overall neutron flux evaluations was achieved at a significant cost, on the order of several million dollars, to GE.

The development of the evaluation process along with the interpretation and application of the analytical results is derived from the extensive experience database that constitutes a major GE asset.

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GE's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GE'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 GE.

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.

GE's competitive advantage will be lost if its competitors are able to use the results of the GE 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 GE 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 GE of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

STATE OF CALIFORNIA)
) ss:
COUNTY OF SANTA CLARA)

George B. Stramback, 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 San Jose, California, this 1st day of June 2001.


George B. Stramback
General Electric Company

Subscribed and sworn before me this 1st day of June 2001.


Notary Public, State of California

