



GE Nuclear Energy

General Electric Company
P. O. Box 780, Wilmington, NC 28402

December 13, 1996

MFN-185-96
RJR-96-139

Document Control Desk
Nuclear Regulatory Commission
Washington, D. C. 20555-0001

Attention: T. E. Collins, Acting Branch Chief
Reactor Systems Branch

Subject: **GE Licensing Topical Report, Methodology and Uncertainties for Safety Limit
MCPR Evaluations, NEDC-32601P, December 1996**

- Reference: 1. Letter from R. J. Reda to the Document Control Desk transmitting *Proposed
Amendment 25 to GESTAR II on Cycle-Specific Safety Limit MCPR*, dated
December 13, 1996.
2. *General Electric BWR Thermal Analysis Basis (GETAB): Data, Correlation and
Design Application*, NEDE-10958-PA and NEDO 10958-A, January 1977.
3. *General Electric Fuel Bundle Designs*, NEDE-31152P, Revision 5, June 1996.

This letter submits for NRC review twenty-two copies of the subject licensing topical report (LTR). This LTR is being used by GESTAR per Reference 1.

The LTR contains information that modifies some of the uncertainties contained in References 2 and 3. These updated values are based on the most recent analysis of available data and are believed by GE to represent more accurate estimates of the true uncertainties. The report identifies two uncertainties where the revised uncertainty values are higher than previously reported. Note, however, that both of these uncertainties have a negligible contribution to the overall uncertainties used in the Safety Limit MCPR.

GE will also be submitting another LTR (NEDC-32694P) that will address the power distribution uncertainties consistent with 3D MONICORE. This LTR will be submitted in January 1997.

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The Safety Limit MCPR is used to establish the Operating Limit MCPR in all GE fueled BWRs. The established practice of applying undue conservatism in the calculation of the safety limit result in limiting the operation of the plants—possibly resulting in derating of the plants and inefficient utilization of the nuclear fuel. The requested review and approval of these new uncertainties contained in the attached licensing topical report is considered a cost beneficial licensing action (CBLA) in accordance with NRC Administrative Letter 95-02, *Cost Beneficial Licensing Actions*. Several utilities will be supporting this CBLA with cost studies within a short time. GE supports a utility estimate that each 0.01 increase in the operating limit MCPR (OLMCPR) results in approximately \$100,000 per fuel cycle cost increase. Thus, substantial cost savings will be realized when this licensing basis change is approved.

Information contained in the attachment is of the type which GE maintains in confidence and withholds from public disclosure and is indicated by "brackets" in the margin of the text. It has been handled and classified as proprietary by GE as indicated in the attached affidavit. We hereby request that it be withheld from public disclosure in accordance with the provisions of 10CFR2.790. If you need further information, please contact John L. Embley, (910) 675-5774.

Very truly yours,



R. J. Reda, Manager
Fuels and Facilities Licensing

Attachment

cc: R. C. Jones, Jr. (NRC)
L. E. Phillips (NRC)
T. L. Huang (NRC)
S. P. Congdon
J. L. Embley

bcc. J. G. Andersen
P. C. Hecht (for MFN file)
C. L. Heck
R. B. Linford
J. L. Rash
C. W. Smith
G. L. Sozzi
R. C. Stirn
G. A. Watford



Affidavit

I, **Ralph J. Reda**, being duly sworn, depose and state as follows:

- (1) I am Manager, Fuels and Facilities Licensing, 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 *Methodology and Uncertainties for Safety Limit MCPR Evaluations*, NEDC-32601P, December 1996, and is indicated by "brackets" in the margin of the text.
- (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) 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 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.
 - f. 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. 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 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.
- (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) is classified as proprietary because it contains details of the uncertainties applied to GE's Safety Limit MCPR analysis.

The development of the uncertainties and methods used for this analysis, along with the testing, development and approval of the supporting critical power correlation was achieved at a significant cost, on the order of several million dollars, to GE.

- (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 fuel design 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 North Carolina)
County of New Hanover) SS:

Ralph J. Reda, 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 13th day of December, 1996

Ralph J. Reda

Ralph J. Reda
General Electric Company

Subscribed and sworn before me this 13th day of December, 1996

Leanne D. Dennis
NOTARY
Notary Public, State of North Carolina
My commission expires: 4/01