GENERAL & ELECTRIC

NUCLE AR POWER SYSTEMS DIVISION

GENERAL ELECTRIC COMPANY • 175 CURTNER AVENUE • SAN JOSE CALIFORNIA 95125 MFN - 069-84

May 31, 1984

U.S. Nuclear Regulatory Commission Office of Nuclear Reactor Regulation Washington, D.C. 20555

Attention:

Robert J. Bosnak, Chief

Mechanical Engineering Branch

Gentlemen:

SUBJECT:

PROPOSED MARK II AND III DEGB PROBABILISTIC STUDIES TO SUPPORT THE CRGR REVIEW OF TASK ACTION PLAN B-6 FOR BWRS

Attached please find the proposed Mark II and Mark III double-ended guillotine break (DEGB) probabilistic studies to support the Committee to Review Generic Requirements (CRGR) review of Task Action Plan B-6 for BWRs. This information provides the details of the proposed study presented at the NRR/RES/GE meeting on May 10, 1984. It should be sufficient for the NRC to determine the technical acceptability of the approach before the studies begin in mid-August 1984.

A presentation before the CRGR on the resolution of Task Action Plan B-6, "Loads, Load Combinations, and Stress Limits," for BWRs is scheduled for early 1985. However, only the Lawrence Livermore National Laboratory (LLNL) Mark I DEGB probabilistic study is in progress or planned prior to the CRGR presentation. Since the CRGR review is for generic resolution of Task Action Plan B-6 for BWRs, DEGB probabilistic studies for Mark II and Mark III plants must be included in addition to the Mark I study currently in progress. GE proposes to perform Mark II and III DEGB probabilistic studies in parallel with the LLNL Mark I study utilizing alternate (simplified) calculational models that can be benchmarked to the more rigorous LLNL models. It is also proposed that the NRC review the Mark II and III DEGB probabilistic studies in conjunction with the January 31, 1984 submittal on the GESSAR II docket supporting the leak-before-break approach.

We are requesting that the attached information designated as proprietary be withheld from public disclosure pursuant to Section 2.790 of 10CFR Part 2.

If you have any questions please contact myself (408) 925-2606 or J.N. Fox (408) 925-5039 of my staff.

Very truly yours,

DIR Quirk, Manager BWR Systems Licensing

Nuclear Safety & Licensing Operation

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cc: J.A. O'Brien (NRC)
D.B. Liaw (NRC)
D.C. Scaletti (NRC)
L.S. Gifford (GE-Bethesda)
R. Villa (GE-San Jose)
J.N. Fox (GE-San Jose)

GENERAL ELECTRIC COMPANY

AFFIDAVIT

- I, Joseph F. Quirk, being duly sworn, depose and state as follows:
- I am Manager, BWR Systems Licensing, Nuclear Safety & Licensing Operation, General Electric Company, 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.
- The information sought to be withheld pertains to the proprietary information submitted in a General Electric report entitled "Proposed Mark II and III DEGB Probabilistic Studies to Support the CRGR Review of Task Action Plan B-6 for BWRs."
- 3. In designating material as proprietary, General Electric utilizes the definition of proprietary information and trade secrets set forth in the American Law Institute's Restatement of Torts, Section 757. This definition provides:

"A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business and which gives him an opportunity to obtain an advantage over competitors who do not know or use it... A substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring information... Some factors to be considered in determining whether given information is one's trade secret are: (1) the extent to which the information is known outside of his business; (2) the extent to which it is known by employees and others involved in his business; (3) the extent of measures taken by him to guard the secrecy of the information; (4) the value of the information to him and to his competitors; (5) the amount of effort or money expended by him in developing the information; (6) the ease or difficulty with which the information could be properly acquired or duplicated by others."

- 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 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 consisting of supporting data and analyses, including test data, relative to a process, method or apparatus, the application of which provide a competitive economic advantage, e.g., by optimization or improved marketability.

- c. 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;
- d. Information which reveals cost or price information, production capacities, budget levels or commercial strategies of General Electric, its customers or suppliers;
- e. Information which reveals aspects of past, present or future General Electric customer-funded development plans and programs of potential commercial value to General Electric;
- f. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection;
- g. Information which General Electric must treat as proprietary according to agreements with other parties.
- In addition to proprietary treatment given to material meeting the standards enumerated above. General Electric customarily maintains in confidence preliminary and draft material which has not been subject to complete proprietary, technical and editorial review. This practice is based on the fact that draft documents often do not appropriately reflect all aspects of a problem, may contain tentative conclusions and may contain errors that can be corrected during normal review and approval procedures. Also, until the final document is completed it may not be possible to make any definitive determination as to its proprietary nature. General Electric is not generally willing to release such a document to the general public in such a preliminary form. Such documents are, however, on occasion furnished to the NRC staff on a confidential basis because it is General Electric's belief that it is in the public interest for the staff to be promptly furnished with significant or potentially significant information. Furnishing the document on a confidential basis pending completion of General Electric's internal review permits early acquaintance of the staff with the information while protecting General Electric's potential proprietary position and permitting General Electric to insure the public documents are technically accurate and correct.
- 6. Initial approval of proprietary treatment of a document is made by the Subsection Manager of the originating component, the man most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within the Company is limited on a "need to know" basis and such documents at all times are clearly identified as proprietary.
- 7. The procedure for approval of external release of such a document is reviewed by the Section Manager, Project Manager, Principal Scientist or other equivalent authority, by the Section 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 in accordance with the standards enumerated above. Disclosures outside General Electric are generally limited to regulatory bodies, customers and potential customers and their agents, suppliers and licensees only in accordance with appropriate regulatory providions or proprietary agreements.

- 8. The document mentioned in paragraph 2 above has been evaluated in accordance with the above criteria and procedures and has been found to contain information which is proprietary and which is customarily held in confidence by General Electric.
- The information mentioned in paragraph 2 provides alternate probabilistic models for calculating the probability of a double-ended guillotine break in BWR piping.
- 10. The information to the best of my knowledge and belief, has consistently been held in confidence by the General Electric Company, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties have been made pursuant to regulatory provisions of proprietary agreements which provide for maintenance of the information in confidence.
- 11. Public disclosure of the information sought to be withheld is likely to cause substantial harm to the competitive position of the General Electric Company and deprive or reduce the availability of profit-making opportunities because:
 - a. It was developed with the expenditure of resources exceeding \$100,000.
 - b. Public availability of this information would deprive General Electric of the ability to seek reimbursement, would permit competitors to utilize this information to General Electric's detriment, and would impair General Electric's ability to maintain licensing agreements to the substantial financial and competitive disadvantage of General Electric.
 - c. Public availability of the information would allow foreign competitors, including competiting BWR suppliers, to obtain containment information at no cost which General Electric developed at substantial cost. Use of this information by foreign competitors would give them a competitive advantage over General Electric by allowing foreign competitors to produce their containments at lower cost than General Electric.

STATE OF CALIFORNIA) ss:

Joseph F. Quirk, 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 31^{at} day of 2may, 1984.

General Electric Company

Subscribed and sworn before me this 3/24 day of

may , 1984.

NOTARY PUBLIC, STATE OF CALIFORNIA

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OFFICIAL SEAL
RUTHE M KINNAMON
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY

SANTA CLARA COUNTY My comm. expires APR 26, 1985

175 Curtner Avenue, San Jose, CA 95125