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RECIP.NAME RECIPIENT AFFILIATION
VASSALLO,D.B. Operating Reactors Branch 2

SUBJECT: Forwards "Performance Evaluation of Nine Mile Point Unit 1 Core Spray Sparger." Core spray distribution results support existing LOCA analysis performed in accordance w/10CFR50, App K. Rept withheld (ref 10CFR2.790).

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NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

September 13, 1983

Attention: Mr. Domenic B. Vassallo, Chief
Operating Reactors Branch No. 2
Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Re: Nine Mile Point Unit 1
Docket No. 50-220
DPR-63

Dear Mr. Vassallo:

During a July 19, 1983 meeting with members of your staff, we committed to provide an updated evaluation of the Nine Mile Point Unit 1 core spray sparger performance. Our previous evaluation (Performance Evaluation of the Nine Mile Point 1 Core Spray Sparger in a Steam Environment, NEDE-22127) was submitted on August 19, 1982. Enclosed is the updated evaluation, "Performance Evaluation of the Nine Mile Point Unit 1 Core Spray Sparger," NEDE-30241. The report concludes that the core spray distribution results, in conjunction with core cooling sensitivity studies, support the existing Nine Mile Point Unit 1 loss of coolant accident analysis performed in accordance with 10 CFR 50 Appendix K.

Four questions were raised by the Nuclear Regulatory Commission during the review of the 1982 report. Attached is a copy of the four questions as transmitted to us. Our response to each of the questions is contained in the enclosed report as follows:

Question 1:	Sections A.2.4 through A.2.7 (pages A-7 through A-9 and Figure A-1)
Question 2:	Section A.7 (pages A-20 through A-24)
Question 3:	Section A.6 (pages A-18 and A-19)
Question 4:	Section 3.2.5 (page 3-6 and Figure 3-5)

As outlined in the enclosed affidavit, NEDE-30241 is proprietary to the General Electric Company.

Very truly yours,

C. V. Mangan
Vice President
Nuclear Engineering & Licensing

CVM/DKG:ja
Enclosures

REQUEST FOR ADDITIONAL INFORMATION REGARDING STAFF REVIEW OF NEDE-22127

1. Present the data which shows that differences between the MIE factor based on "reactor nozzles in air" and the MIE factor based on "simulator nozzles in air" are small.

2. Comparison of core spray flow test data with predictions for BWR/6 indicates that a substantial uncertainty exists in bundle flow rates predicted with the subject methodology. What are the uncertainty values applied in the NMP-1 analysis? Present the data and methods used to derive these uncertainties.

3. Present data to support the assumption that bundle flow rates for dual sparger operation are "at least" a factor of 2 greater than flows obtained with single sparger operation.

4. The methodology used to predict core spray distribution has been verified with BWR/6 SSTF test data for core radii greater than 27". Present the data which verifies the validity of the method for radii less than 27".

GENERAL ELECTRIC COMPANY

AFFIDAVIT

I, Glenn G. Sherwood, being duly sworn, depose and state as follows:

1. I am Manager, Safety and 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.

2. The information sought to be repelled is:

   "Performance Evaluation of the Nine Mile Point Unit 1 Core Spray Sparger" NEDE-30241, September 1983.

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;

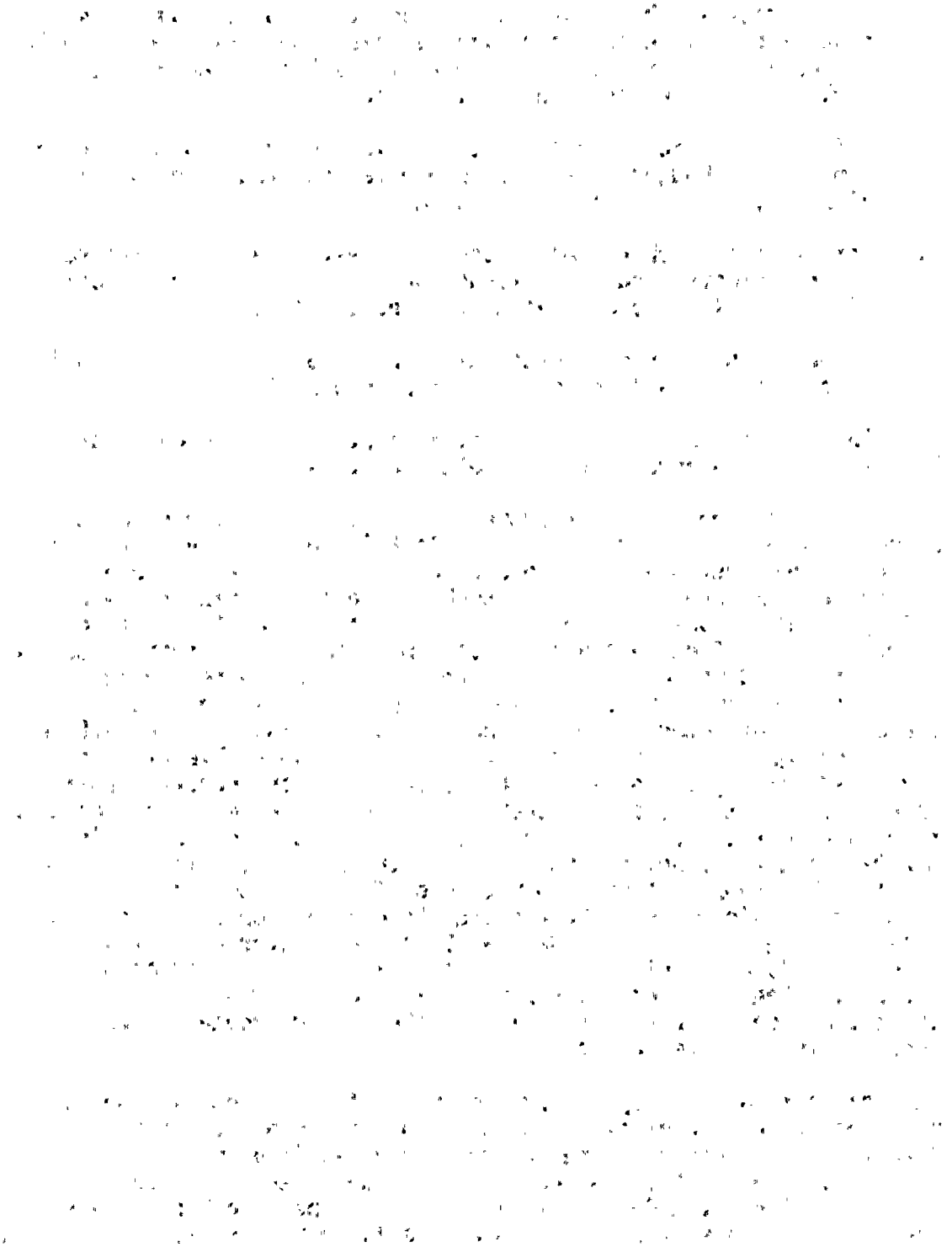
e. Information which reveals aspects of past, present or future General Electric customer-funded development plans and programs of potential commercial value to General Electric;

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.

5. 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 provisions 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.

9. The document mentioned in paragraph 2 above describes various test parameters and results from GE test facilities used to justify the reactor core spray system. In addition, it gives detailed descriptions of current methodology, assumptions, and models in this area.

10. The information to the best of my knowedge 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 or proprietary agreements which provide for maintenance of the information in confidence.

11. Public disclosure of the material 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 over many years with the expenditure of substantial resources exceeding $12,000,000 by the General Electric Company.

    b. The resources dedicated to this effort were those of the General Electric Company.

    c. Public availability of the material would allow competitors, including competing BWR suppliers to obtain valuable test results and obtain the capability to perform design evaluations at no cost, which GE developed at substantial cost. Use of this material would provide competitors a competitive advantage over General Electric by allowing competitors to offer such calculations and evaluations at lower cost than General Electric.

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) ss:

Glenn G. Sherwood, 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 12 day of SEPT., 1983.

Glenn G. Sherwood
General Electric Company

Subscribed and sworn before me this 12 day of SEPT. 1983.

OFFICIAL SEAL
KAREN S. VOGELHUBER
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY
My Commission Expires Dec. 21, 1984

Karen S. Vogelhuber
NOTARY PUBLIC, STATE OF CALIFORNIA

NOTICE

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