Benton City Technology

~~ROUTE 1 BOX 186 BENTON CITY WASHINGTON 99350~~
~~509 588-0694~~

ARLIN K. POSTMA, PhD, CHE

Route 1, Box 46A, Halfway, Oregon 97834
503 742-7033

March 4 voucher (Feb & Mar)

March 4, 1984 [redacted] + 32 hours at [redacted]

TA 44421

16 hours mtg at PNL
4 hours letter report
12 hours in Feb

Ms. Jocelyn Mitchell
Accident Evaluation Branch
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Jocelyn:

This letter describes a technical meeting on pool scrubbing held at PNL on February 28, 1984 in Richland, Washington. Organizations represented included GE, PNL, EPRI, BNL, and NRC. An attendance list is attached.

This informal meeting was requested by GE. The purpose was to inform PNL that SPARC significantly underpredicts both GE data and EPRI data on pool scrubbing efficiency. GE suggested the addition of an empirical entrance effect DF multiplier and a reduction in swarm rise velocity; these changes would result in the prediction of higher scrubbing efficiencies. My impression is that GE wants a quick change in SPARC so that NRC evaluations of GESSAR done with SPARC will show higher pool scrubbing efficiencies.

This meeting was not highly structured and no formal agreements or commitments were developed. A number of topics were discussed; the more important of these are described below.

1. Deborah Hankins of GE noted that their work with SPARC had illustrated that the code significantly underpredicted DF's measured by both GE and EPRI. GE suggested that SPARC should be modified quickly, so that NRC evaluations of GESSAR could be done with a new version of SPARC that would result in higher (and presumably more realistic) pool scrubbing efficiencies.

2. Don Jones of GE presented the results of a comparison of SPARC with

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GE and EPRI tests. He showed that SPARC underpredicted measured DF's by up to several orders of magnitude. He also showed improved fits of SPARC to the data when an entrance DF was added and when the swarm rise velocity was reduced.

3. Rich Oehlberg of EPRI listed some recent test results that indicated that scrubbing efficiencies improved dramatically when water temperature was increased from 24°C to 100°C. This is an unexpected result when viewed from the SPARC perspective because SPARC predicts decreased collection efficiencies for higher temperatures as a result of steam flux into bubbles. It should be noted that the hot pool tests results are very preliminary and subject to change as a result of future evaluations.

4. Pete Owczarski of PNL discussed his approach in modelling particle growth in rising bubbles. Growth of particles may be promoted by the cooling of gas in bubbles as a result of expansion work exerted by a rising bubble. This effect is similar to the formation of rain when a moist air mass moves vertically in the earth's atmosphere. Scrubbing efficiencies would be enhanced if particle growth were significant; this mechanism could concievably explain the discrepancy between measured and predicted DF's, particularily at higher pool temperatures.

5. Discussions of bubble eccentricity identified a difference of opinion between GE and PNL. GE maintains that eccentricity increases with bubble size up to a/b = 3. PNL, based on EPRI test data, takes the upper limit of a/b as roughly 1.4. Lower eccentricities lead to lower inertial collection efficiencies. Both organizations are going to reexamine the basis for their selection of eccentricity input values.

6. The need for thorough evaluation of experimental methods was stressed by myself and Kevin Winegardner of PNL. I reiterated my concern that particle size measurements used in the EPRI-BCL program may be inadequate. Oehlberg indicated that he had not received my earlier comments, hence was totally unaware of our concerns. Verbal discussions with Oehlberg

indicated that above-the-pool retention had been found to be highly significant. This is just one of the potential problems we had identified in our letter of May 27, 1983. A copy of the letter, and a memo of concern is attached.

Conclusions and summary statements resulting from the subject meeting are as follows.

1. I am greatly concerned that the EPRI program will be carried out to completion with no recogonition of NRC concerns. Results may be ambiguous and therefore inadequate to allow a realistic assessment of pool scrubbing by AEB. If our technical concerns continue to be ignored, then an NRC-sponsored program may be required to resolve ambiguities.

2. The recent EPRI test data on hot pools are preliminary and are not firm enough to technically support modifications of SPARC which would result in predicted higher scrubbing efficiencies.

3. SPARC is still in the development stage. It is becoming progressively more complex. Assessments of the validity of the code will be possible only if experimental data, obtained under well defined conditions, become available.

Please get in touch, Jocelyn, if you wish to discuss any aspect of the meeting or the issues raised herein.

Very truly yours,

Arlin Postma

Arlin K. Postma

Enclosures: as stated

AKP/bh

9/20/83

(4)

GENERAL ELECTRIC

NUCLEAR POWER SYSTEMS DIVISION
GENERAL ELECTRIC COMPANY • 175 CURTNER AVENUE • SAN JOSE, CALIFORNIA 95125
M/C 682, (408) 925-5040

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

Attention: Mr. D.G. Eisenhut, Director
Division of Licensing

proprietary

Gentlemen:

SUBJECT: IN THE MATTER OF 238 NUCLEAR ISLAND GENERAL ELECTRIC STANDARD SAFETY ANALYSIS REPORT (GESSAR II)
DOCKET NO. STN 50-447

SUBMITTAL OF PROPRIETARY INFORMATION IN RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING SEVERE ACCIDENT REVIEW OF GESSAR II

Reference: C.O. Thomas (NRC) letter to G.G. Sherwood (GE), "Request for Additional Information Regarding Severe Accident Review of GESSAR II," September 2, 1983

The reference letter requested additional information regarding the severe accident portion of GE's GESSAR II submittal. Attached please find responses to questions included in the reference letter that were previously given to GE. Additionally, the referenced letter contained four new questions not previously provided to GE. We have determined that responses to these questions (No. 720.98, 720.99, 720.100 and 720.101) will be provided by October 15, 1983.

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

Very truly yours,

Glenn G. Sherwood, Manager
Nuclear Safety & Licensing Operation

Attachments

cc: F.J. Miraglia (w/o Att.)
C.O. Thomas (w/o Att.)
D.C. Scaletti (w/o Att.)
A. Thadani (w/o Att.)
L.S. Gifford (w/o Att.)

~~8309210219~~

GENERAL ELECTRIC COMPANY

AFFIDAVIT

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

1. I am Manager, 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.

2. The information sought to be withheld is contained in the proprietary responses to questions on the Severe Accident portion of the 238 Nuclear Island General Electric Standard Safety Analysis Report (GESSAR II).

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 information mentioned in paragraph 2 provides additional information on the GESSAR II Probabilistic Risk Asssment contained in Section 15D.3 of the GESSAR II submittal.

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 $500,000.

    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)
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 15th day of September, 1983.

Glenn G. Sherwood
General Electric Company

Subscribed and sworn before me this 15th day of September 1983.

Ruthe M. Kinnamon
NOTARY PUBLIC, STATE OF CALIFORNIA

OFFICIAL SEAL
RUTHE M KINNAMON
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY
My comm. expires APR 26, 1985

175 Curtner Avenue, San Jose, CA 95125

KWH: rm/A091422
9/14/83

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GENERAL ELECTRIC

NUCLEAR POWER SYSTEMS DIVISION
GENERAL ELECTRIC COMPANY • 175 CURTNER AVENUE • SAN JOSE, CALIFORNIA 95125
M/C 682, (408) 925-2606

MNF-007-84
JNF-003-84

January 19, 1984

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

Ltr. only w/affidavit

Attention: Cecil O. Thomas, Chief
Standardization and Special Projects Branch

Gentlemen:

SUBJECT: IN THE MATTER OF 238 NUCLEAR ISLAND GENERAL ELECTRIC STANDARD SAFETY ANALYSIS REPORT (GESSAR II)
DOCKET NO. STN 50-447

SUBMITTAL OF PROPRIETARY INFORMATION SUPPORTING SEISMIC FRAGILITY ANALYSIS

Attached, please find the detailed information supporting the GESSAR II Seismic Fragility Analysis requested at the January 9 and 10, 1984 meetings held in San Jose. A copy of this information has been provided to Benjamin & Associates.

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

Very truly yours,

J F Quirk

J. F. Quirk, Manager
BWR Systems Licensing
Nuclear Safety & Licensing Operation

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1/1

CHANGE: LPDR, NSIC, NTIS, NRC PDR } LTR ONL

Attachments

cc: F. J. Miraglia (NRC) w/o attach.
D. C. Scaletti (NRC) w/o attach.
A. Thadani (NRC) w/o attach.
L. S. Gifford (GE-Bethesda) w/o attach.
J. Reed (Benjamin & Associates) w/o attach.

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A PDR

GENERAL ELECTRIC COMPANY

AFFIDAVIT

I, Joseph F. Quirk, being duly sworn, depose and state as follows:

1. 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.

2. The information sought to be withheld pertains to the proprietary submittal on the GESSAR II Seismic Event Analysis in support of the Severe Accident portion of the 238 Nuclear Island General Electric Standard Safety Analysis Report (GESSAR II).

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 information mentioned in paragraph 2 provides additional information in support of the severe accident portion of GESSAR II contained in Section 15D.3 of the GESSAR II submittal.

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 $500,000.

    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 given them a competitive advantage over General Electric by allowing foreign competitors to produce their containments at lower cost than General Electric.

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) 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 19 day of JANUARY, 1984.

Joseph F. Quirk
General Electric Company

Subscribed and sworn before me this 19 day of JANUARY 1984.

Karen S. Vogelhuber
NOTARY PUBLIC, STATE OF CALIFORNIA

JFQ:cal/K01179

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

(6)

GENERAL ELECTRIC

NUCLEAR POWER SYSTEMS DIVISION
GENERAL ELECTRIC COMPANY • 175 CURTNER AVENUE • SAN JOSE, CALIFORNIA 95125
M/C 682, (408) 925-2606

MFN-013-84
KWH-002-84

February 1, 1984

prop. only

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

Attention: Mr. D.G. Eisenhut, Director
Division of Licensing

Gentlemen:

SUBJECT: IN THE MATTER OF 238 NUCLEAR ISLAND GENERAL ELECTRIC STANDARD SAFETY ANALYSIS REPORT (GESSAR II)
DOCKET NO. STN 50-447

SUBMITTAL OF PROPRIETARY INFORMATION IN RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING SEVERE ACCIDENT REVIEW OF GESSAR II

Reference: C.O. Thomas (NRC) letter to G.G. Sherwood (GE), "Request for Additional Information Regarding Severe Accident Review of GESSAR II," January 26, 1984

The reference letter requested additional information regarding the severe accident portion of GE's GESSAR II submittal. Attached please find responses* to the questions included in the reference letter. Also attached is a rationale for the treatment of fire and flood event uncertainty analysis.

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

Very truly yours,

J.F. Quirk, Manager
BWR Systems Licensing
Nuclear Safety & Licensing Operation

Attachments

* Draft

cc: F.J. Miraglia (NRC) w/o attach.
D.C. Scaletti (NRC) w/o attach.
A. Thadani (NRC) w/o attach.
C.O. Thomas (NRC) w/o attach.
L.S. Gifford (GE-Bethesda) w/o attach.
R. Villa

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A PDR

GENERAL ELECTRIC COMPANY

AFFIDAVIT

I, Joseph F. Quirk, being duly sworn, depose and state as follows:

1. 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.

2. The information sought to be withheld is contained in proprietary responses to questions in support of the Severe Accident portion of the 238 Nuclear Island General Electric Standard Safety Analysis Report (GESSAR II).

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 information mentioned in paragraph 2 provides fracture mechanics and leak rate calculational methods, qualification of piping for the leak-before-break approach, and the probability of a LOCA in reactor coolant system 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 informaton 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 $500,000.

    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)
COUNTY OF SANTA CLARA) 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 1 day of FEBRUARY, 1984.

Joseph F. Quirk
Joseph F. Quirk
General Electric Company

Subscribed and sworn before me this 1 day of FEBRUARY 1984.

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

KWH:pc/L01314

(7)

GENERAL ELECTRIC

NUCLEAR POWER SYSTEMS DIVISION
GENERAL ELECTRIC COMPANY • 175 CURTNER AVENUE • SAN JOSE, CALIFORNIA 95125
M/C 682, (408) 925-5040

MFN-222-83
JNF-086-83

December 2, 1983

Fiche Frame
21405-008-047

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

Attention: Mr. D.G. Eisenhut
Division of Licensing

SUBJECT: IN THE MATTER OF 238 NUCLEAR ISLAND
GENERAL ELECTRIC STANDARD SAFETY ANALYSIS REPORT (GESSAR II)
DOCKET NO. STN 50-447

APPENDIX 15E - STATION BLACKOUT CAPABILITY

Attached please find a draft of new GESSAR II Appendix 15E pertaining to station blackout capability. This appendix concludes that the GESSAR II station blackout capability exceeds ten (10) hours. The assessed capability assumes credit for operator actions that are straightforward and where means exists to enable the operator to execute the action. Where features and/or equipment are not present, potential design improvements are recommended. It is anticipated that upon completion of NRC review a formal amendment on the GESSAR II docket will be submitted. This is anticipated to occur in early 1984.

If there are any questions on the information provided herein please contact J.F. Quirk at (408) 925-2606 or J.N. Fox of my staff at (408) 925-5039.

Very truly yours,

Glenn S. Sherwood, Manager
Nuclear Safety & Licensing Operation

Attachment

cc: F.J. Miraglia (NRC)
D.C. Scaletti (NRC)
C.O. Thomas (NRC)
R.M. Ketchel (GE-Washington Liaison Office)
L.S. Gifford (GE- Bethesda Liaison Office)
R. Villa (GE)

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GENERAL ELECTRIC

NUCLEAR POWER SYSTEMS DIVISION
GENERAL ELECTRIC COMPANY • 175 CURTNER AVENUE • SAN JOSE, CALIFORNIA 95125
MC 682, (408) 925-2606

MFN-234-83

December 29, 1983

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

Prop. draft

Attention: Mr. D. G. Eisenhut, Director
Division of Licensing

Gentlemen:

SUBJECT: IN THE MATTER OF 238 NUCLEAR ISLAND GENERAL ELECTRIC STANDARD SAFETY ANALYSIS REPORT (GESSAR II) SEVERE ACCIDENT REVIEW OF GESSAR II

The attached draft report, "GESSAR II Seismic Event Uncertainty Analysis," is provided in support of previous GE submittals on the GESSAR docket on severe accident issues. This analysis provides the variability in total seismic-initiated core damage frequency. It is anticipated that upon completion of NRC review, a formal amendment on the GESSAR II docket will be submitted including this and other analysis of external events. This is expected to occur in early 1984.

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

Very truly yours,

J. F. Quirk, Manager
BWR Systems Licensing
Nuclear Safety & Licensing Operation

JFQ:rf/G12272

Attachments

cc: F. J. Miraglia (NRC)
C. O. Thomas (NRC)
D. C. Scaletti (NRC)
A. Thadani (NRC)
L. S. Gifford (GE-Bethesda)

Change: PDR, NSIC, NTIS } Ltr Only

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PDR ADOCK 05000447
A FDR

GENERAL ELECTRIC COMPANY

AFFIDAVIT

I, Joseph F. Quirk, being duly sworn, depose and state as follows:

1. 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.

2. The information sought to be withheld is contained in the proprietary submittal on the GESSAR II Seismic Event PRA Uncertainty Analysis in support of the Severe Accident portion of the 238 Nuclear Island General Electric Standard Safety Analysis Report (GESSAR II).

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 information mentioned in paragraph 2 provides additional information in support of the severe accident portion of GESSAR II contained in Section 15D.3 of the GESSAR II submittal.

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 $500,000.

    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 have given them a competitive advantage over General Electric by allowing foreign competitors to produce their containments at lower cost than General Electric.

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) 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 29 day of December, 1983.

Joseph F. Quirk
General Electric Company

Subscribed and sworn before me this 29 day of December 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

KH:rf/G12273

(9)

GENERAL ELECTRIC

NUCLEAR POWER SYSTEMS DIVISION
GENERAL ELECTRIC COMPANY • 175 CURTNER AVENUE • SAN JOSE, CALIFORNIA 95125
M/C 682, (408) 925-2606

MFN-211-83

November 17, 1983

proprietary

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

Attention: Mr. D.G. Eisenhut, Director
Division of Licensing

Gentlemen:

SUBJECT: IN THE MATTER OF 238 NUCLEAR ISLAND GENERAL ELECTRIC STANDARD SAFETY ANALYSIS REPORT (GESSAR II)
DOCKET NO. STN 50-447

SUBMITTAL OF PROPRIETARY INFORMATION - GESSAR II INTERNAL EVENT PRA UNCERTAINTY ANALYSIS IN SUPPORT OF THE SEVERE ACCIDENT REVIEW OF GESSAR II

The attached report, "GESSAR II Internal Event PRA Uncertainty Analysis," is provided in support of previous GE submittals on the GESSAR docket on severe accident issues. This analysis provides the variability in total internally-initiated core damage frequency by propagation of uncertainties through the fault and event trees in order to estimate the frequency of radionuclide release. This analysis was committed in the response to Question 720.143 on the GESSAR II PRA.

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

Very truly yours,

J.F. Quirk, Manager
BWR Systems Licensing
Nuclear Safety & Licensing Operation

Change: PDR, NSIC, NTIS } Ltr Only

Attachments

cc: F.J. Miraglia (NRC)
C.O. Thomas (NRC)
D.C. Scaletti (NRC)
A. Thadani (NRC)
L.S. Gifford (GE-Bethesda)

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A PDR

GENERAL ELECTRIC COMPANY

AFFIDAVIT

I, Joseph F. Quirk, being duly sworn, depose and state as follows:

1. 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.

2. The information sought to be withheld is contained in the proprietary submittal on the GESSAR II Internal Event PRA Uncertainty Analysis in support of the Severe Accident portion of the 238 Nuclear Island General Electric Standard Safety Analysis Report (GESSAR II).

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 information mentioned in paragraph 2 provides additional information in support of the severe accident portion of GESSAR II contained in Section 15D.3 of the GESSAR II submittal.

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 $600,000.

    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 given them a competitive advantage ower General Electric by allowing foreign competitors to produce their containments at lower cost than General Electric.

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) 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 17 day of NOVEMBER, 1983.

Joseph F Quirk
Joseph F. Quirk
General Electric Company

Subscribed and sworn before me this 17 day of NOVEMBER 1983.

Karen S. Vogelhuber
NOTARY PUBLIC, STATE OF CALIFORNIA

KH:cal/K110417

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

(10)

GENERAL ELECTRIC

NUCLEAR POWER SYSTEMS DIVISION
GENERAL ELECTRIC COMPANY • 175 CURTNER AVENUE • SAN JOSE, CALIFORNIA 95125
M/C 682, (408) 925-2606

September 21, 1983

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

Attention: Mr. D.G. Eisenhut, Director
Division of Licensing

proprietary

Gentlemen:

SUBJECT: IN THE MATTER OF 238 NUCLEAR ISLAND GENERAL ELECTRIC STANDARD SAFETY ANALYSIS REPORT (GESSAR II)
DOCKET NO. STN 50-447

SUBMITTAL OF PROPRIETARY INFORMATION - GESSAR II SEISMIC EVENT ANALYSIS IN SUPPORT OF THE SEVERE ACCIDENT REVIEW OF GESSAR II

The attached report, "GESSAR II Seismic Event Analysis," is provided in response to the NRC draft Policy Statement on Severe Accidents, which requires the consideration of seismic and other external events for plant certification. This report has been prepared in such a manner that it will allow the NRC Staff to approve the GESSAR II methodology and design for severe accident seismic events. It is GE's expectation that following approval, a future applicant referencing GESSAR II would only have to show that his site specific hazard curve falls within the GESSAR II hazard curve to determine that the attached report would be applicable to that site.

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

Very truly Yours,

J.F. Quirk

J.F. Quirk, Manager
BWR Systems Licensing
Nuclear Safety & Licensing Operation

Attachments

cc: F.J. Miraglia (NRC)
C.O. Thomas (NRC)
D.C. Scaletti (NRC)
A. Thadani (NRC)
L.S. Gifford (GE-Bethesda)

DESIGNATED ORIGINAL
Certified By DCP

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Change: PDR, NSIC, NTIS } Ltr Only

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A PDR

GENERAL ELECTRIC COMPANY

AFFIDAVIT

I, Joseph F. Quirk, being duly sworn, depose and state as follows:

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    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 ower General Electric by allowing foreign competitors to produce their containments at lower cost than General Electric.

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 21st day of September, 1983.

Joseph F. Quirk

Joseph F. Quirk
General Electric Company

STATE OF CALIFORNIA
COUNTY OF SANTA CLARA } ss:

Subscribed and sworn before me this 21st day of September 1983

Ruthe M. Kinnamon
NOTARY PUBLIC, STATE OF CALIFORNIA

OFFICIAL SEAL
RUTHE M KINNAMON
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY
My comm. expires APR 26, 1985
175 Curtner Avenue, San Jose, CA 95125

KH:pc/L09213

UNION OF CONCERNED SCIENTISTS 1346 Connecticu Avenue, N.W. • S. 1101 • Washington, DC 20036 • (202) 296-5600

13 March 1984

FREEDOM OF INFORMATION ACT REQUEST
FOIA-84-175
Rec'd 3-15-84

Mr. J. M. Felton, Director
Division of Rules and Records
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

RE: Freedom of Information Act Request for the GESSAR-II Probabilistic Risk Assessment and Associated NRC and NRC-contractor Reviews of that Report (Sholly FOIA Request Number 84-07)

Dear Mr. Felton:

Pursuant to the Freedom of Information Act, please make available at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D.C., copies of documents in the following categories:

A. A copy of the General Electric Probabilistic Risk Assessment for the GESSAR-II standard plant design (BWR/6 Mark III), and all updates, amendments, appendices, addenda, supplements, and all other changes thereto.

B. Copies of all NRC staff reviews of the documents described above in "A".

C. Copies of all NRC contractor reviews of the documents described above in "A".

D. For any review identified under "C" above, provide the name of the reviewing organization, the lead investigators, all other investigators, the NRC Contract and FIN numbers assigned to the review project, the funding provided for the review project, and the NRC Form 189 for each such project.

If there are any questions regarding this request, please contact me at 296-5600. It is my understanding that a proprietary claim has been made with respect to some or all of the documents identified in "A" above. This request specifically includes a request to review the bases for the priprietary claim and release all of the documents discussed in "A" above.

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I can see no basis for a proprietary claim on a probabilistic risk assessment study. Further, I am aware of no other such claim with respect to the dozens of other such studies which have been performed to date.

Your prompt attention to this request will be appreciated.

Sincerely,

Steven C. Sholly
Technical Research Associate