



GE ENERGY

Proprietary Notice

This letter forwards proprietary information in accordance with 10CFR2.390. Upon the removal of Enclosure 1, the balance of this letter may be considered non-proprietary.

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MFN 06-105
April 17, 2006

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

Subject: CPR Margins – DSS-CD LTR (NEDC-33075P, Detect And Suppress Solution – Confirmation Density) (TAC No. MC1737)

As stated in Reference 1, GE provided License Topical Report (LTR), NEDE-33147P, DSS-CD TRACG Application to support the approval of a Safety Evaluation for the Detect and Suppress Solution – Confirmation Density (DSS-CD) LTR, NEDC-33075P (Reference 2). GE's understanding, as documented in References 3 and 4, was that the DSS-CD LTR would be approved prior to the approval of TRACG/DSS-CD LTR. Consequently, the DSS-CD LTR makes use of large Critical Power Ratio (CPR) uncertainties to demonstrate relatively significant margins to the Safety Limit Minimum Critical Power Ratio (SLMCPR).

Recently, GE was informed that the TRACG/DSS-CD LTR will be approved concurrent with the approval of the DSS-CD LTR. GE welcomes the approval of both LTRs. With the TRACG/DSS-CD LTR approved, the CPR margins presented in the DSS-CD LTR may be less essential to support a plant-specific application.

Therefore, each plant-specific application for DSS-CD will include a comparison of the resulting margins to the SLMCPR and the margins presented in the DSS-CD LTR. The response to RAI 6, originally submitted in Reference 5, has been revised accordingly. The changes are indicated by revision bars in the margins.

Enclosure 1 contains GE proprietary information as defined by 10 CFR 2.390. GE customarily maintains this information in confidence and withholds it from public disclosure. A non-proprietary version of Enclosure 1 is contained in Enclosure 2.

DOCS

The Enclosure 3 affidavit identifies that the information contained in Enclosure 1 has been handled and classified as proprietary to GE. GE hereby requests that the information of Enclosure 1 be withheld from public disclosure in accordance with the provisions of 10 CFR. 2.390 and 9.17.

If you have any questions, please contact, Mike Lalor at (408) 925-2443 or myself.

Sincerely,



George Stramback
Manager, Regulatory Services

Project No. 710

Reference:

1. GE Letter, George Stramback (GE) to NRC, '*Issuance of DSS-CD TRACG LTR, NEDE-33147P (TAC No. MB5705)*,' MFN 04-019, dated February 27, 2004
2. NEDC-33075P, Revision 5, Licensing Topical Report, *General Electric Boiling Water Reactor Detect and Suppress Solution – Confirmation Density*, November 2005.
3. GE Letter, George Stramback (GE) to NRC, '*NRC Review of TRACG Code for DSS-CD*,' MFN 03-040, dated June 23, 2003
4. NRC Letter, Alan Wang (NRC) to James Klapproth (GE), '*Review of GE Nuclear Energy Licensing Topical Report NEDC-33075 Revision 2, "General Electric Boiling Water Reactor Detect and Suppress Solution – Confirmation Density"*' MFN 03-047, dated July 2, 2003
5. GE letter, George Stramback (GE) to NRC, *Responses to DSS-CD LTR RAIs*, MFN 05-148, dated December 7, 2005

Enclosure:

1. GE Revised Response to DSS-CD LTR RAI 6 – Proprietary
2. GE Revised Response to DSS-CD LTR RAI 6 – Non-Proprietary
3. Affidavit, George B. Stramback, April 17, 2006

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JF Klapproth (GE/Wilmington)

MA Lalor (GE/San Jose)

LM Quintana (GE/Wilmington)

PT Tran (GE/San Jose)

AB Wang (NRC)

eDRF 0000-0011-9147

ENCLOSURE 2

MFN 06-105

GE Revised Response to DSS-CD LTR RAI 6

Non-Proprietary Notice

IMPORTANT NOTICE

This is a non-proprietary version of Enclosure 1, which has the proprietary information removed. Portions of the document that have been removed are indicated by an open and closed double brackets as shown here [[]].

NRC RAI 6

On page 1 of 58, GE response should be elaborated especially to include the review status and brief content of the review.

GE Response

The referenced response refers to GE Letter MFN 04-001 dated January 23, 2004. The referenced response contains GE's commitment to provide a Licensing Topical Report (LTR) documenting the qualification of TRACG for DSS-CD stability application. The LTR, NEDE-33147P, *DSS-CD TRACG Application*, was issued in GE Letter, MFN 04-019, dated February 23, 2004.

The TRACG code is used to confirm the Minimum Critical Power Ratio (MCPR) margin during reasonably limiting instability event simulations for DSS-CD applications. LTR NEDE-33147P justifies the use of TRACG for modeling instabilities in the DSS-CD process.

The review of NEDE-33147P is presently ongoing. In letter dated July 2, 2003 (MFN 03-047), the NRC stated that the staff could approve the DSS-CD LTR while the review of the TRACG methodology is being completed.

Recently, GE was informed that the TRACG/DSS-CD LTR will be approved concurrent with the approval of the DSS-CD LTR. GE welcomes the approval of both LTRs. With the TRACG/DSS-CD LTR approved, the CPR margins presented in the DSS-CD LTR may be less essential to support a plant-specific application.

Many plant-specific issues can affect the CPR margins. As one example, Section 3.3.1.9 of the DSS-CD LTR states [[

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Therefore, each plant-specific application for DSS-CD will include a comparison of the resulting margins to the SLMCPR and the margins presented in the DSS-CD LTR.

ENCLOSURE 3

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Affidavit

General Electric Company

AFFIDAVIT

I, **George B. Stramback**, state as follows:

- (1) I am Manager, Regulatory Services, General Electric Company ("GE") and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.
- (2) The information sought to be withheld is contained in Enclosure 1 of GE letter MFN 06-105, *CPR Margins – DSS-CD LTR (NEDC-33075P, Detect And Suppress Solution – Confirmation Density) (TAC No. MC1737)*, dated April 17, 2006. The proprietary information in Enclosure 1, *GE Revised Response to DSS-CD LTR RAI 6*, is delineated by a double underline inside double square brackets. Figures and large equation objects are identified with double square brackets before and after the object. In each case, the superscript notation⁽³⁾ refers to Paragraph (3) of this affidavit, which provides the basis for the proprietary determination.
- (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 2.390(a)(4) for "trade secrets" (Exemption 4). The material for which exemption from disclosure is here sought 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 aspects of past, present, or future General Electric customer-funded development plans and programs, resulting in potential products to General Electric;

- d. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs (4)a., and (4)b, above.

- (5) To address 10 CFR 2.390 (b) (4), the information sought to be withheld is being submitted to NRC in confidence. The information is of a sort customarily held in confidence by GE, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by GE, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties including any required transmittals to NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.
- (6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within GE is limited on a "need to know" basis.
- (7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his delegate), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside GE are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- (8) The information identified in paragraph (2), above, is classified as proprietary because it contains detailed results of analytical models, methods and processes, including computer codes, which GE has developed, and applied to perform stability evaluations using the detection and suppression capability of the confirmation density algorithm for the BWR.

The development of the detection and suppression capability of the confirmation density algorithm, in GE's LTR NEDC-33075P, *General Electric Boiling Water Reactor Detect And Suppress Solution – Confirmation Density*, Revision 4, dated July 2004, for the BWR was achieved at a significant cost, in excess of ¼ million dollars, to GE.

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

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GE's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GE's comprehensive BWR safety and technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology and includes development of the expertise to determine and apply the appropriate evaluation process. In addition, the technology base includes the value derived from providing analyses done with NRC-approved methods.

The research, development, engineering, analytical and NRC review costs comprise a substantial investment of time and money by GE.

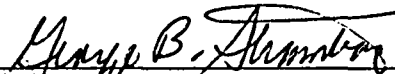
The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

GE's competitive advantage will be lost if its competitors are able to use the results of the GE experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to GE would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive GE of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information, and belief.

Executed on this 17th day of April 2006.


George B. Stramback
General Electric Company

ENCLOSURE 1

MFN 06-105

GE Revised Response to DSS-CD LTR RAI 6

PROPRIETARY INFORMATION NOTICE

This enclosure contains proprietary information of the General Electric Company (GE) and is furnished in confidence solely for the purpose(s) stated in the transmittal letter. No other use, direct or indirect, of the document or the information it contains is authorized. Furnishing this enclosure does not convey any license, express or implied, to use any patented invention or, except as specified above, any proprietary information of GE disclosed herein or any right to publish or make copies of the enclosure without prior written permission of GE. The header of each page in this enclosure carries the notation "GE Proprietary Information."

GE proprietary information is identified by a double underline inside double square brackets. In each case, the superscript notation⁽³⁾ refers to Paragraph (3) of the affidavit provided in Enclosure 3, which documents the basis for the proprietary determination. [[This sentence is an example.⁽³⁾]] Specific information that is not so marked is not GE proprietary.