



## GE ENERGY

Louis M. Quintana  
Manager, Licensing

P.O. Box 780, M/C A-30  
Wilmington, NC 28401  
USA

T 910.675.6616  
F 910.362.6616  
Louis.Quintana@ge.com

### Proprietary Notice

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

MFN 06-169  
June 7, 2006

*Proj 710*

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

**Subject: Response to Request For Additional Information (RAI) Regarding General Electric Nuclear Energy (GENE) Topical Report (TR) NEDE-32906P, Revision 2, "TRACG Application For Anticipated Operational Occurrences (AOO) Transient Analyses" (TAC No. MD0249)**

Reference 1 submitted Revision 2 to NEDC-32906P for NRC review and approval. By Reference 2 the staff requested additional information regarding the Reference 1 report. This letter provides responses to those RAIs. The revised TR pages are included in the responses and will be incorporated into the -A version of the TR following the SE.

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

Enclosure 1 is the proprietary version of the Revision 2 RAI responses and Enclosure 2 is a non-proprietary version. Enclosure 3 contains the affidavit.

If you have any questions, please contact James Harrison at (910) 675-6604 or myself.

Sincerely,

Louis M. Quintana  
Manager, Licensing

*DO45*

Project No. 710

References:

1. Letter from L.M. Quintana (GE) to Michelle C. Honcharik (US NRC), *GE Licensing Topical Report NEDE-32906P, Revision 2, "TRACG Application for Anticipated Operational Occurrences (AOO) Transient Analyses"*, MFN 06-046, February 14, 2006.
2. Letter from Michelle C. Honcharik (US NRC) to L.M. Quintana (GE), Request For Additional Information (RAI) Regarding General Electric Nuclear Energy (GENE) Topical Report (TR) NEDE-32906P, Revision 2, "TRACG Application For Anticipated Operational Occurrences (AOO) Transient Analyses" (TAC No. MD0249), May 31, 2006 (GE MFN 06-164).

Enclosures:

1. RAI Responses - GE Proprietary Information
2. RAI Responses - Non-Proprietary Information
3. Affidavit, dated June 7, 2006.

cc: A Lingenfelter (GNF/Wilmington)  
JF Harrison (GE/Wilmington)  
JF Klapproth (GE/Wilmington)  
MA Lalor (GE/San Jose)  
GB Stramback (GE/San Jose)  
PT Tran (GE/San Jose)  
eDRF 0000-0054-8842

## ENCLOSURE 2

MFN 06-169

### RAI Responses Regarding GE Licensing Topical Report NEDE-32906P, Revision 2, "TRACG Application for Anticipated Operational Occurrences (AOO) Transient Analyses"

#### Non-Proprietary Version

#### IMPORTANT NOTICE

This is a non-proprietary version of Enclosure 1 to MFN 06-169, which has the proprietary information removed. Portions of the RAI responses that have been removed are indicated by white space with a side bar in the right margin or by an open and closed bracket as shown here [[ ]].

**NRC Question**

1. Equation 7-3 should be broken down into two parts, with, for example, Equation 7-3(a) remaining the same as the current Equation 7-3, and a new Equation 7-3(b) for the situation when the objective is to demonstrate the "Key Output" is to be greater than (" $>$ ") the specified design limit. This would clarify the form of Equation 7-7.

**Response**

Equation 7-3 has been broken down to clarify Equation 7-7. The updated Page 7-10 of the TR is attached.



**NRC Question**

2. Figure 7-19, for the Leibstadt loss of feedwater statistical analysis, should be revised to be consistent with the other figures in Section 7 to include the Revision 2 results, in the same form as for example Figure 7-18 or a justification as to why the change in the void coefficient would not impact the results.

**Response**

A note of explanation has been added to Section 7.6.3. The updated Page 7-30 of the TR is attached.



**NRC Question**

3. The NRC staff safety evaluation dated October 22, 2001 (Agencywide Documents Access and Management System Accession No. ML012740518), states that Table 5-1 demonstrates the normality of the void coefficient at the 5 percent level. In Revision 2, GENE proposes removal of this table. GENE needs to provide an alternative to support the NRC staff's previous conclusion or reinstate Table 5-1 in Revision 2.

**Response**

Table 5-1 and the associated text have been restored. Section 5 Pages 5-2 through 5-6 of the TR are attached.











**ENCLOSURE 3**

**MFN 06-169**

**Affidavit**

**General Electric Company**  
**AFFIDAVIT**

**I, Louis M. Quintana, state as follows:**

- (1) I am Manager, Licensing, General Electric Company (“GE”), and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.
- (2) The information sought to be withheld is contained in Enclosure 1 of MFN 06-169, Louis M. Quintana (GE) to Michelle C. Honcharik (NRC), *Response to Request For Additional Information (RAI) Regarding General Electric Nuclear Energy (GENE) Topical Report (TR) NEDE-32906P, Revision 2, “TRACG Application For Anticipated Operational Occurrences (AOO) Transient Analyses” (TAC No. MD0249)*, dated June 7, 2006. The proprietary information in Enclosure 1, *Response to Request For Additional Information (RAI) Regarding General Electric Nuclear Energy (GENE) Topical Report (TR) NEDE-32906P, Revision 2, “TRACG Application For Anticipated Operational Occurrences (AOO) Transient Analyses,”* is identified by “sidebars” drawn in the right-hand margin or by [[double underlines inside double square brackets<sup>(3)</sup>]]. In each case, the sidebars and the superscript notation <sup>(3)</sup> refer 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 the detailed results including the process and methodology for application of TRACG to the performance of evaluations of AOOs for GE BWRs. This TRACG code has been developed by GE for over fifteen years, at a total cost in excess of three million dollars. The reporting, evaluation and interpretations of the results, as they relate to the BWR, was achieved at a significant cost 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 7<sup>th</sup> day of June 2006.



Louis M. Quintana  
Manager, Licensing