



## GE ENERGY

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Proj-710

MFN 06-046  
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U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555-0001

Attention: Michelle C. Honcharik, Project Manager, Special Projects Branch,  
Division of Policy and Rulemaking

Subject: **GE Licensing Topical Report NEDE-32906P, Revision 2, "TRACG Application for Anticipated Operational Occurrences (AOO) Transient Analyses"**

This letter submits Revision 2 to NEDC-32906P for NRC review and approval. The acceptance version of the LTR, NEDC-32906P-A, Revision 1, was transmitted to the NRC by Reference 1. GE has corrected a small error in the quantification of the accuracy of the void coefficient, an element of the NRC-approved methodology, used in TRACG licensing basis AOO analyses. The corrections in void coefficient accuracy typically result in more conservative response in the licensing analyses. Revision 2 of the LTR has been updated to document the resulting changes in the sensitivity study results and in the information included in RAI responses. The Revision 2 void coefficient accuracy correction and other non-technical changes are described on page ii of the LTR and clearly marked in the body of the LTR with revision bars. Because the error did not involve the model description or qualification studies, there are no changes to the TRACG model and qualification reports (Reference 2).

The error associated with this correction and the process associated with code updates was discussed with NRC staff during the annual GNF Fuel Technology Update meeting at Wilmington in January 2005 (Reference 3). At that time, GE/GNF committed to provide the subject TRACG application LTR update.

In accordance with Reference 4, GE requests that the review be completed within two months following the receipt of the revised report, resulting in a safety evaluation by the end of April 2006. Until the NRC approves this update, utilities choosing to apply TRACG for a licensing basis AOO analysis will need to perform 10CFR50.59 evaluations of the method element change.

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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, also included in the report. 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 Revision 2 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

Project No. 710

References:

1. Letter from L.M. Quintana (GE) to Michelle C. Honcharik (US NRC), *GE Licensing Topical Report NEDE-32906P-A, Revision 1, TRACG Application for Anticipated Operational Occurrences (AOO) Transient Analyses*, MFN 06-042, February 6, 2006.
2. J. G. M. Andersen, et al., *TRACG Model Description*, NEDE-32176P, Rev. 2, December 1999, and *TRACG Qualification*, NEDE-32177P, Rev. 2, January 2000.
3. GNF Technology Update Meeting, Wilmington, NC, January 11-12, 2005
4. Letter from H.N. Berkow (US NRC) to J.F. Klapproth (GE), *Implementation of a Revised Review Process for Topical Reports*, October 21, 2003.

Enclosures:

1. NEDC-32906P, Revision 2 - GE Proprietary Information
2. NEDO-32906, Revision 2 - Non-Proprietary Information
3. Affidavit, dated February 14, 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 0000-0015-7130

## ENCLOSURE 1

MFN 06-046

### GE Licensing Topical Report NEDE-32906P, Revision 2, “TRACG Application for Anticipated Operational Occurrences (AOO) Transient Analyses”

#### GE Proprietary Information

##### 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.”

In Revisions 0 and 1 of this document, the proprietary information of the GE Company was indicated by “bars” drawn in the right-hand margin of the text of the report (as shown to the right of this paragraph). This marking process was retained for those portions of this document that were not modified by Revision 2. The GE proprietary information in those portions of the document that were affected by Revision 2 is identified by [[double underlines inside double square brackets<sup>{3}</sup>]]. The sidebars and the superscript notation<sup>{3}</sup> refer to Paragraph (3) of this affidavit, which provides the basis for the proprietary determination.

## ENCLOSURE 2

MFN 06-046

GE Licensing Topical Report NEDO-32906, 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 06-046, which has the proprietary information removed. In Revisions 0 and 1 of this document, the proprietary information of the GE Company was indicated by “bars” drawn in the right-hand margin of the text of the report (as shown to the right of this paragraph). This marking process was retained for those portions of this document that were not modified by Revision 2. Portions of the document 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 [[ ]].

**ENCLOSURE 3**

**MFN 06-046**

**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 the GE proprietary report, NEDE-32906P-A, *TRACG Application for Anticipated Operational Occurrences (AOO) Transient Analyses, Revision 2*, Class III (GE Proprietary Information), dated February 2006. In this Revision 2 document, two different marking patterns are used to distinguish the proprietary information of the GE Company. In Revisions 0 and 1 of NEDE-32906P, the proprietary information was indicated by "sidebars" drawn in the right-hand margin of the report. This marking process was retained for those portions of this document that were not modified by Revision 2. The GE proprietary information in those portions of the document that were affected by Revision 2 is identified 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 14th day of February 2006.



Louis M. Quintana  
Manager, Licensing