



GE Energy

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MFN 06-069

Docket No. 52-010

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U.S. Nuclear Regulatory Commission
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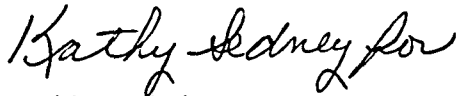
**Subject: Partial Response to NRC Request for Additional Information Letter
No. 11 for the ESBWR Design Certification Application – TRACG
Thermal Hydraulic Code – RAI Numbers 21.6-1 and 21.6-3**

Enclosure 1 contains GE's response to the subject NRC RAIs transmitted via the Reference 1 letter. The Enclosure 2 CD referenced in the response to RAI 21.6-3 contains information that GE considers proprietary in accordance with 10 CFR 2.390. The CD label contains the designation "GE Proprietary Information." The data on the CD is entirely proprietary and due to the nature of these files, it is not possible to provide a non proprietary version.

The affidavit contained in Enclosure 3 identifies that the information contained in Enclosure 2 has been handled and classified as proprietary to GE. GE hereby requests that the information of Enclosure 2 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17.

If you have any questions about the information provided here, please let me know.

Sincerely,



David H. Hinds
Manager, ESBWR

Reference:

1. MFN 06-068, Letter from U.S. Nuclear Regulatory Commission to David Hinds, *Request for Additional Information Letter No. 11 Related to ESBWR Design Certification Application*, February 27, 2006

Enclosure:

1. MFN 06-069 – Partial Response to NRC Request for Additional Information Letter No. 11 for the ESBWR Design Certification Application – TRACG Thermal Hydraulic Code – RAI Numbers 21.6-1 and 21.6-3
2. MFN 06-069 – TRACG Input Deck – ESBWR ATWS Analyses – GE Proprietary Information
3. Affidavit – David J. Robare – dated March 13, 2006

cc: WD Beckner USNRC (w/o enclosures)
AE Cabbage USNRC (with enclosures)
LA Dudes USNRC (w/o enclosures)
GB Stramback GE/San Jose (with enclosures)
eDRF 0000-0051-4325

MFN 06-069
Enclosure 1

ENCLOSURE 1

MFN 06-069

**Partial Response to NRC Request for Additional Information
Letter No. 11 for the ESBWR Design Certification Application
TRACG Thermal Hydraulic Code
RAI Numbers 21.6-1 and 21.6-3**

NRC RAI 21.6-1

The DCD provides the core pressure drop and the core support plate pressure drop in table 4.4-1a. The staff has used these pressure drops to back out the loss coefficients to be used in the 4500 MWh ESBWR TRACE input model for independent calculations. Does the total core pressure drop listed in DCD Table 4.4-1a include the core support plate pressure drop? If not, provide this information.

GE Response

Yes, the total core pressure drop listed in DCD Table 4.4-1a includes the core support plate pressure drop.

NRC RAI 21.6-3

Provide TRACG input decks for the staff to use in the independent calculations of ATWS events. Please provide the following TRACG input decks for ATWS analyses: loss of condenser vacuum (LCV) and loss of feedwater heating (LOFWH). Include all necessary baseline, extract and restart decks along with all PANACEA wrapup files and 3D kinetics input files (TDT/TOSDAT) files.

GE Response

A CD containing the requested data is contained in Enclosure 2.

MFN 06-069
Enclosure 2

ENCLOSURE 2

MFN 06-069

TRACG Input Deck – ESBWR ATWS Analyses

Contains GE Proprietary Information

PROPRIETARY INFORMATION NOTICE

This enclosure (CD) 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 CD label contains the designation, "GE Proprietary Information ^{3}"

ENCLOSURE 3

MFN 06-069

Affidavit

General Electric Company

AFFIDAVIT

I, David J. Robare, state as follows:

- (1) I am Project Manager, Plant Performance and Optimization, 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 2 (CD) of GE letter MFN 06-069, David H. Hinds to NRC, *Partial Response to NRC Request for Additional Information Letter No. 11 for the ESBWR Design Certification Application – TRACG Thermal Hydraulic Code – RAI Numbers 21.6-1 and 21.6-3* dated March 10, 2006. The proprietary information is in Enclosure 2, *TRACG Input Deck – ESBWR ATWS Analyses*. The CD label contains the designation "GE Proprietary Information ^{3}" 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 2.790(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 TRACG analytical models, methods and processes, including computer codes, which GE has developed, and applied to perform ATWS evaluations for the BWR. GE has developed this TRACG code 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 ATWS evaluations for the BWR was achieved at a significant cost, in excess of one quarter 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 13th day of March 2006



David J. Robare
General Electric Company