



HITACHI

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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.

MFN 08-581

Docket No. 52-010

July 21, 2008

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

Subject: **Response to Portion of NRC Request for Additional Information Letter No. 175 Related to ESBWR Design Certification Application – TRACG Computer Code – RAI Number 4.4-66S01**

The purpose of this letter is to submit the GE Hitachi Nuclear Energy (GEH) response to the U.S. Nuclear Regulatory Commission (NRC) Request for Additional Information (RAI) sent by NRC letter dated April 4, 2008. GEH response to RAI Number 4.4-66S01 is addressed in Enclosure 1.

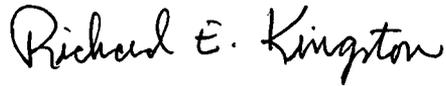
Enclosure 1 contains GEH proprietary information as defined by 10 CFR 2.390. GEH customarily maintains this information in confidence and withholds it from public disclosure. A non-proprietary version is provided in Enclosure 2.

The affidavit contained in Enclosure 3 identifies that the information contained in Enclosure 1 has been handled and classified as proprietary to GEH. GEH 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 or require additional information, please contact me.

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Sincerely,



Richard E. Kingston
Vice President, ESBWR Licensing

Reference:

1. MFN 08-349, Letter from U.S. Nuclear Regulatory Commission to James C. Kinsey, GEH, *Request For Additional Information Letter No. 175 Related To ESBWR Design Certification Application*, dated April 4, 2008

Enclosures:

1. Response to Portion of NRC Request for Additional Information Letter No. 175 Related to ESBWR Design Certification Application – TRACG Computer Code – RAI Number 4.4-66S01 – GEH Proprietary Information
2. Response to Portion of NRC Request for Additional Information Letter No. 175 Related to ESBWR Design Certification Application – TRACG Computer Code – RAI Number 4.4-66S01 – Public Version
3. Affidavit – David H. Hinds – Executed July 21, 2008

cc: AE Cabbage USNRC (with enclosure)
GB Stramback GEH/San Jose (with enclosure)
RE Brown GEH/Wilmington (with enclosure)
eDRF 0000-0088-0056

Enclosure 2

MFN 08-581

**Response to Portion of NRC Request for
Additional Information Letter No. 175
Related to ESBWR Design Certification Application**

TRACG

RAI Number 4.4-66 S01

Public Version

NRC RAI 4.4-66 S01:

Explain the calculation process for TRACG channel model flow areas and loss coefficients and their conversion to PANACEA code input.

Provide an explanation of the calculation process for conversion of TRACG lumped channel flow areas and loss coefficients and how they correspond to those used as input to the PANACEA code hydraulic model.

GEH Response:

The above request for additional information assumes that the fuel channel flow area and loss coefficient data are converted from the TRACG code input to the PANACEA code input, the inputs of both codes in fact are assembled independently from data retrieved from the BWR engineering databank (BWREDB) files. The BWREDB files, from which the qualified Engineering Computer Programs (ECPs) draw input to set up core and plant models, are populated through independently verified data transactions. The data to be placed in the BWREDB files come from either directly design basis documents, calculations performed with qualified ECPs or independently verified studies.

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DCD Impact:

No DCD changes will be made in response to this RAI.

No changes to the subject LTR will be made in response to this RAI.

Enclosure 3

MFN 08-581

Affidavit

David H. Hinds

July 21, 2008

GE-Hitachi Nuclear Energy Americas LLC

AFFIDAVIT

I, **David H. Hinds**, state as follows:

- (1) I am the General Manager, New Units Engineering, GE-Hitachi Nuclear Energy Americas LLC ("GEH"), 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 08-581, Mr. Richard E. Kingston to U.S. Nuclear Regulatory Commission, *MFN 08-581 – Response to Portion of NRC Request for Additional Information Letter No. 175 Related to the ESBWR Design Certification – TRACG Computer Code – RAI Number 4.4-66S01*, dated July 21, 2008. The information in Enclosure 1, which is entitled "*MFN 08-581 – Response to Portion of NRC Request for Additional Information Letter No. 175 Related to the ESBWR Design Certification – TRACG Computer Code – RAI Number 4.4-66S01 – GEH Proprietary Information*," contains GEH Proprietary Information. Paragraph (3) of this affidavit provides the basis for the proprietary determination.
- (3) In making this application for withholding of proprietary information of which it is the owner or licensee, GEH 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 GEH's competitors without license from GEH 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 GEH customer-funded development plans and programs, resulting in potential products to GEH;
- 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 GEH, 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 GEH, 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, or subject to the terms under which it was licensed to GEH. Access to such documents within GEH 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 for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside GEH 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 identifies detailed GEH ESBWR TRACG Computer Code assumptions and calculations.

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

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GEH's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GEH's comprehensive BWR safety and technology base, and its commercial value

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 GEH.

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.

GEH's competitive advantage will be lost if its competitors are able to use the results of the GEH 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 GEH 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 GEH of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing and obtaining 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 21st Day of July, 2008.



David H. Hinds
GE-Hitachi Nuclear Energy Americas LLC