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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 09-716

Docket No. 52-010

November 11, 2009

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

Subject: Transmittal of Radiation Shielding Calculations to Support Resolution of RAI 12.4-19, including Supplements

The purpose of this letter is to submit a compact disc (CD) containing eight calculations related to ESBWR Radiation Shielding. These calculations were used to generate tables in the ESBWR DCD, Rev. 6, Chapter 12. This transmittal is related to resolution of NRC Request for Additional Information (RAI) 12.4-19, including all supplements through Supplement 5 (Reference 1).

Enclosure 1 contains electronic format files for each of the eight calculations. These files contain GEH proprietary information as defined by 10 CFR 2.390. GEH customarily maintains this information in confidence and withholds it from public disclosure. Since the files are GEH proprietary in their entirety, no public version of Enclosure 1 is provided.

The affidavit contained in Enclosure 2 identifies that information contained in Enclosure 1 has been handled and classified as proprietary to GEH. GEH 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.

Sincerely,

Richard E. Kingston
Vice President, ESBWR Licensing

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NRO

Reference:

1. MFN 09-689, *Request For Additional Information Letter No. 388 Related to ESBWR Design Certification Application*, November 2, 2009

Enclosures:

1. Transmittal of Radiation Shielding Calculations to Support Resolution of RAI 12.4-19, including Supplements – Compact Disc (CD) - GEH Proprietary Information

Contains:

- Folder: DCD Input Calculations

Files: a. 092-134-C-Z-01201 Rev 1.pdf, "Shielding and Radiation Doses in the LWMS Tank Rooms"

b. 092-134-C-Z-01202 Rev 1.pdf, "Shielding and Radiation Doses in the SWMS Tank Rooms"

c. 092-134-E-Z-07510 Rev 3.pdf, "Normal Operation Dose Assessment"

d. 092-134-F-Z-07517 Rev 0.pdf, "Airborne Radioactivity Concentrations inside the Buildings during Normal Operations"

- Folder: Supporting Calculations

Files: a. 092-134-C-Z-00007 Rev 2.pdf, "Liquid Radwaste Discharge Activity"

b. 092-134-C-Z-00013 Rev 1.pdf, "Solid Waste Management System Source Term Calculation"

c. 092-134-C-Z-02001 Rev 5.pdf, "Offsite Dose Analysis in Normal Operation"

d. 092-134-R-Z-07502 Rev 2.pdf, "Radiation Shielding Criteria"

2. Transmittal of Radiation Shielding Calculations to Support Resolution of RAI 12.4-19, including Supplements - Affidavit

cc: AE Cabbage USNRC (with enclosures)
JG Head GEH/Wilmington (with enclosure 2 only)
DH Hinds GEH/Wilmington (with enclosure 2 only)
TL Enfinger GEH/Wilmington (with enclosure 2 only)
eDRF Section 0000-0098-6376, Rev. 0

Enclosure 2

MFN 09-716

**Transmittal of Radiation Shielding Calculations to
Support Resolution of RAI 12.4-19, including
Supplements**

Affidavit

GE-Hitachi Nuclear Energy Americas LLC

AFFIDAVIT

I, **Larry J. Tucker**, state as follows:

- (1) I am Manager, ESBWR Engineering, GE Hitachi Nuclear Energy ("GEH"), 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 GEH's letter, MFN 09-716, Mr. Richard E. Kingston to U.S. Nuclear Energy Commission, entitled "Transmittal of Radiation Shielding Calculations to Support Resolution of RAI 12.4-19, including Supplements" dated November 11, 2009. Enclosure 1, entitled "Transmittal of Radiation Shielding Calculations to Support Resolution of RAI 12.4-19, including Supplements – Compact Disc (CD) – GEH Proprietary Information," is a compact disc containing electronic format files that contain GEH proprietary information in their entirety.
- (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) is classified as proprietary because it contains details of GEH's design and licensing methodology. The development of the methods used in these analyses, along with the testing, development and approval of the supporting methodology was achieved at a significant cost to GEH.
- (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 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 GEH.

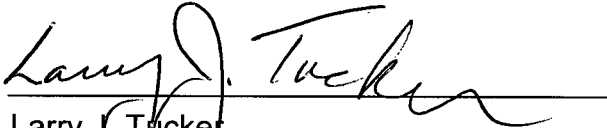
The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

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 11th day of November 2009.


Larry J. Tucker
GE-Hitachi Nuclear Energy Americas LLC

Enclosure 1

MFN 09-716

Transmittal of Radiation Shielding Calculations to Support Resolution of RAI 12.4-19, including Supplements

Compact Disc

GEH Proprietary Information

This enclosure contains GE-Hitachi Nuclear Energy Americas LLC (GEH) proprietary information 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 GEH disclosed herein or any right to publish or make copies of the enclosure without prior written permission of GEH. This enclosure is a compact disc (CD) containing electronic files that contain GEH proprietary information in their entirety.