

GE-Hitachi Nuclear Energy Americas LLC

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Proprietary Notice  
*This letter forwards proprietary information in accordance with 10CFR2.390. Upon the removal of Enclosures 1, 2, and 3, the balance of this letter may be considered non-proprietary.*

MFN 07-384  
July 24, 2007

Docket No. 52-010

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

Subject: **Submission of ESBWR Licensing Topical Reports – NEDE-33217P, Revision 3, NEDE-33226P, Revision 2, and NEDE-33245P, Revision 2**

The purpose of this letter is for GE-Hitachi Nuclear Energy Americas (GE-H) to submit to the U.S. Nuclear Regulatory Commission (NRC) Licensing Topical Reports (LTRs) NEDE-33217P, *ESBWR Man-Machine Interface System and Human Factors Engineering Implementation Plan*, Revision 3 (Enclosure 1), NEDE-33226P, *ESBWR I&C Software Management Plan*, Revision 2 (Enclosure 2), and NEDE-33245P, *ESBWR I&C Software Quality Assurance Plan*, Revision 2 (Enclosure 3). This letter is to support NRC review of the GE-H application for final design approval and standard design certification of the Economic Simplified Boiling Water Reactor (ESBWR) standard plant design pursuant to 10 CFR Part 52 (Reference 1).

Enclosures 1, 2, and 3 contain proprietary information of the type that GE-H maintains in confidence and withholds from public disclosure. The information has been handled and classified as proprietary to GE-H as indicated in the enclosed affidavit required by 10 CFR 2.390(b)(1) (Enclosure 7). GE-H hereby requests that the information in Enclosures 1, 2, and 3 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. Enclosures 4, 5, and 6 are the non-proprietary versions of the LTRs, which do not contain proprietary information and are suitable for public disclosure.

At the request of the NRC, the subject Licensing Topical Reports (LTRs) have been reviewed and revised to improve the readability of the proprietary documents. The redacting process that GE-H uses resulted in documents that were difficult for the NRC to review. The marking of proprietary data was updated without compromising our existing redacting process in order to make

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the reading of the proprietary text easier. An additional concern about consistent proprietary and non-proprietary markings was also addressed.

One major addition from the original transmittal was the addition of a new Section 6.4.3 and associated sub-sections to NEDE-33226P, Software Management Plan (SMP) for "Software Validation Testing". During our review it was noted that the SMP was weak in defining our "Software Validation Testing" methodology from a management point of view. This testing was adequately specified in NEDE-33245P, SQAP.

Please note that GE-H considers the Table of Contents (TOC) in each of the subject LTRs to be proprietary information. We have concluded that, a competitor could gain a competitive advantage by reviewing the TOCs because they outline our processes for establishing the HFE/MMIS design. This advantage could allow a competitor significant cost and time savings in developing a program of their own.

Should you have any questions concerning this matter, please contact me at 910-675-5057.

Sincerely,

  
James C. Kinsey  
Project Manager, ESBWR Licensing

References:

1. MFN 05-084 - Letter from Steven A. Hucik, GE, to William D. Beckner, NRC, *General Electric Company Application for Final Design Approval and Design Certification of ESBWR Standard Plant Design*, dated August 24, 2005

Enclosures:

1. NEDE 33217P, Revision 3 (Proprietary)
2. NEDE-33226P Revision 2 (Proprietary)
3. NEDE-33245P, Revision 2 (Proprietary)
4. NEDO 33217, Revision 3 (Non-Proprietary)
5. NEDO-33226, Revision 2 (Non-Proprietary)
6. NEDO-33245, Revision 2 (Non-Proprietary)
7. Affidavit for GE-H Proprietary Information for the NRC, executed by James C. Kinsey July 24, 2007

cc: AE Cabbage USNRC (with enclosures)  
RE Brown GE-H/Wilmington (with enclosures)  
GB Stramback GE-H/San Jose (with enclosures)  
eDRF: 0000-0048-2821, Rev. 2 for LTR NEDE-33217P  
0000-0051-3897, Rev. 2 for LTR NEDE-33226P  
0000-0049-7144, Rev. 2 for LTR NEDE-33245P

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**Enclosure 7**

**AFFIDAVIT**

# GE-Hitachi Nuclear Energy Americas LLC

## AFFIDAVIT

I, **James C. Kinsey**, state as follows:

- (1) I am Project Manager. ESBWR Licensing, GE-Hitachi Nuclear Energy Americas LLC ("GE-H"), 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 letter MFN 07-384, *Mr. James C. Kinsey to U.S. Nuclear Regulatory Commission, entitled Submittal of ESBWR Licensing Topical Reports – NEDE-33217P, Revision 3, NEDE-33226P, Revision 2, and NEDE-33245P, Revision 2*, dated July 24, 2007. The proprietary information in Enclosure 1, *ESBWR Licensing Topical Report – I&C Man-Machine Interface System and Human Factors Engineering Implementation Plan - NEDE 33217P, Revision 3*, Enclosure 2, *ESBWR Licensing Topical Report – I&C Software Management Plan, Rev. 2 - NEDE-33226P*, and Enclosure 3, *ESBWR Licensing Topical Report – I&C Software Quality Assurance Plan, Rev. 2 - NEDE-33245P* is in dark red font delineated by a [[dotted underline inside double square brackets]]<sup>131</sup>. Figures and large equation objects are identified with double square brackets before and after the object. In each case, the superscript notation <sup>131</sup> 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-H 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 GE-H's competitors without license from GE-H 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 GE-H customer-funded development plans and programs, resulting in potential products to GE-H;
- 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-H, 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-H, 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-H 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-H 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 GE-H ESBWR methods, techniques, information, procedures and assumptions related to its Human Factors technology. Development of these methods, techniques, information, procedures and assumptions and their application for the design, modification, and analyses methodologies and processes for Human Factors Engineering and Software Management was achieved at a significant cost to GE-H, on the order of approximately several million dollars and would result in a significant economic and competitive advantage to a competitor.

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-H asset.

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GE-H's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GE-H'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-H.

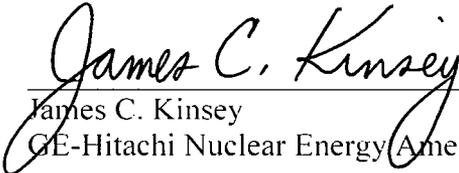
The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

GE-H's competitive advantage will be lost if its competitors are able to use the results of the GE-H 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-H 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-H 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 24<sup>th</sup> day of July 2007.

  
James C. Kinsey  
GE-Hitachi Nuclear Energy Americas LLC