



HITACHI

GE Hitachi Nuclear Energy

James C. Kinsey
Vice President, ESBWR Licensing

PO Box 780 M/C A-55
Wilmington, NC 28402-0780
USA

T 910 675 5057
F 910 362 5057
jim.kinsey@ge.com

Proprietary Notice

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

MFN 08-306

Docket No. 52-010

March 31, 2008

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

Subject: Description of Changes to MELCOR Model and MELCOR Input/Output Files

The purpose of this letter is to submit the GE Hitachi Nuclear Energy (GEH) changes to the MELCOR model and Input/Output files. Enclosure 1 contains a proprietary updated nodalization flow MELCOR model with the following description changes (previously emailed to NRC Staff on March 13, 2008 to facilitate Sandia National Laboratory review):

- Flow path 095 is set to be closed (change between VTT Report Part 3, Rev. 1 and VTT Report Part 3, Rev. 2)
- Flow paths 075 and 057 previously for all Safety Relief Valve (SRV) and SRV/Automatic Depressurization System (ADS) paths are now set only for SRVs and are aligned to Main Steam Line (MSL)
- Flow paths 074 and 056 are new ones describing SRV/ADS flow paths and are aligned to MSL
- Flow paths 073 and 037 are DPVs aligned to MSL
- Flow path 036 is new one describing the DPV aligned to RPV-Upper Plenum

The other changes in the MSL data that were made for VTT Report Part 3, Rev. 2 calculations are as found in NCR Report 6 and 7.

Enclosure 2 attachments are entirely proprietary Compact Disc (CDs) that contains the updated specific, input and output files for Accident Scenarios (AS)

DO68
NRC

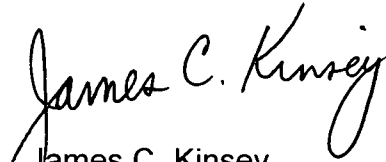
1 through 3. Two CDs for each accident scenario are provided for NRC Staff and Sandia National Laboratory personnel use.

Enclosure 1 Updated MELCOR Flow Nodalization Diagram and Enclosure 2 MELCOR Specific and Input/Output File CDs for Accident Scenarios 1-3 (AS-1-3) contains GEH proprietary information as defined by 10 CFR 2.390. GEH customarily maintains this information in confidence and withholds it from public disclosure.

The affidavit contained in Enclosure 3 identifies that the information contained in Enclosure 1 Updated MELCOR Flow Nodalization Diagram and Enclosure 2 MELCOR Specific and Input Output File CDs for Accident Scenarios 1-3 (AS-1-3) has been handled and classified as proprietary to GEH. GEH hereby requests that the information of Enclosures 1 and 2 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. The Enclosure 1 Updated MELCOR Flow Nodalization Diagram and Enclosure 2 MELCOR Specific and Input/Output File CDs for Accident Scenarios 1-3 (AS-1-3) are entirely proprietary. As a result, no public version is provided.

If you have any questions or require additional information, please contact me.

Sincerely,



James C. Kinsey
Vice President, ESBWR Licensing

Reference:

1. MFN 07-466, Letter from James C. Kinsey, GEH, to U.S. Nuclear Regulatory Commission, Transmittal of "*Estimation and Modeling of Effective Fission Product Decontamination Factor for ESBWR Containment, Part 3 Research Report, VTT-R-06771-07*", dated August 24, 2007

Enclosures:

1. Updated MELCOR Flow Nodalization Diagram – GEH Proprietary Information
2. MELCOR Specific and Input/Output File CDs for Accident Scenarios 1-3 (AS-1-3) – GEH Proprietary Information
3. Affidavit – Larry J. Tucker – March 31, 2008

cc: AE Cubbage USNRC (with enclosure)
GB Stramback GEH/San Jose (with enclosure)
RE Brown GEH/Wilmington (with enclosure)

Enclosure 3

MFN 08-306

Affidavit – Larry J. Tucker

GE-Hitachi Nuclear Energy Americas LLC

AFFIDAVIT

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

- (1) I am Manager, ESBWR 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 to be discussed and sought to be withheld is delineated in the letter from Mr. James C. Kinsey to U.S. Nuclear Regulatory Commission, entitled "Description of Changes to MELCOR Model and MELCOR Input/Output Files," dated March 31, 2008. The information in Enclosures 1 and 2, which is entitled *MFN 08-306 Updated MELCOR Flow Nodalization Diagram – GEH Proprietary Information*, and *MFN 08-306 MELCOR Specific and Input/Output File CDs for Accident Scenarios 1-3 (AS-1-3) – GEH Proprietary Information*, respectively is entirely proprietary. 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 contains computer code inputs developed by GEH for analyzed accident scenarios, using the MELCOR computer model. Development of this Updated MELCOR Flow Nodalization Diagram and MELCOR Specific and Input/Output files was achieved at a significant cost to GEH, on the order of several hundred thousand dollars.
- (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.

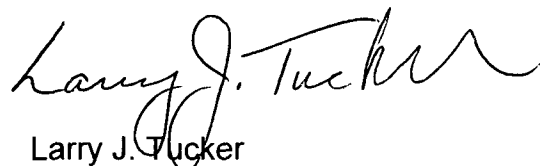
The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

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 31st day of March 2008.

A handwritten signature in black ink, appearing to read "Larry J. Tucker". The signature is fluid and cursive, with a large initial "L" and "T".

Larry J. Tucker
GE-Hitachi Nuclear Energy Americas LLC