GE Energy

James C. Kinsey
Project Manager, ESBWR Licensing

PO Box 780 M/C J-70
Wilmington, NC 28402-0780
USA

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

MFN 07-256

Docket No. 52-010

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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. 66 – RAI Number 21.6-79 and 21.6-91**

Enclosure 1 contains GE's response to the subject NRC RAIs transmitted via the Reference 1 letter.

Enclosure 2 contains a compact disc (CD) that is entirely proprietary information as defined in 10CFR2.390. 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 proprietary information in Enclosure 2 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. A non-proprietary version is not available because the contents of the CD are entirely proprietary.

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 or require additional information regarding the information provided here, please contact me.

D068

Sincerely,

Kathy Sedney for

James C. Kinsey
Project Manager, ESBWR Licensing

Reference:

1. MFN 06-377, Letter from U.S. Nuclear Regulatory Commission to David Hinds, *Request for Additional Information Letter No. 66 Related to the ESBWR Design Certification Application*, October 10, 2006

Enclosures:

1. MFN 07-256 – Response to Portion of NRC Request for Additional Information Letter No. 66 – Related to ESBWR Design Certification Application – RAI Numbers 21.6-79 and 21.6-91
2. MFN 07-256 – Response to Portion of NRC Request for Additional Information Letter No. 66 – Related to ESBWR Design Certification Application – RAI Numbers 21.6-79 and 21.6-91 – Contains GE Proprietary Information
3. Affidavit – James C. Kinsey dated May 17, 2007.

cc: AE Cubbage USNRC (with enclosures)
GB Stramback GE/San Jose (with enclosures)
BE Brown GE/ Wilmington (with enclosures)
eDRF 0067-3533 and 0061-9759

Enclosure 1

MFN 07-256

Response to Portion of NRC Request for

Additional Information Letter No. 66

Related to ESBWR Design Certification Application

RAI Numbers 21.6-79 and 21.6-91

NRC RAI 21.6-79

Correlation for minimum stable film boiling temperature.

Reviewer Summary: In Section 6.6.7 of NEDE-32176P, Rev. 3, you describe the correlation in TRACG for calculating minimum stable film boiling temperature. You have three different options. Describe the conditions under which each of the three options is selected. On page 6-117, you state "The Shumway correlation, however, has a larger data base and captures the flow and pressure dependence better than the Iloeje correlation." The TRACG input decks submitted to the staff show that you have selected the Iloeje model for the ESBWR events. Explain the choice of this model.

GE Response

The Iloeje correlation is the default model in TRACG04 as in earlier versions of the code and that is why it was selected for the ESBWR analyses. The correlation for the minimum stable film boiling temperature (Tmin) is only relevant for events that result in boiling transition. Boiling transition does not occur in any of the ESBWR events that have been analyzed except for some ATWS cases. Even for the limiting LOCA calculation for the ESBWR, the fuel does not uncover and does not experience boiling transition.

If boiling transition should occur, the Illoeje correlation tends to produce a higher value for Tmin than the Shumway correlation. A higher value of Tmin means that quenching of the fuel cladding can initiate at a higher temperature. However, this has essentially no impact on the calculated peak clad temperature (PCT) because values of the PCT that are anywhere near limiting are above the value of Tmin. In other words, the ability to quench as controlled by Tmin occurs at a point in time after the PCT when the clad temperature is already decreasing from a mechanism such as steam cooling. The value of Tmin only determines the temporal response of the clad temperature after the PCT.

For the ATWS scenario in the ESBWR, the PCT remains well below the allowed value and is not the controlling parameter. In any case, the PCT is not sensitive to the Tmin correlation as discussed in the preceding paragraph. The controlling parameter for an ATWS is the heatup of water available for pressure suppression in the containment. Because the Tmin correlation is not important, the Iloeje correlation as used in previous TRACG analyses used to qualify ODYN for ATWS calculations is an acceptable selection.

In general, the homogeneous nucleation model should never be used to perform nominal calculations. The primary usefulness of this model is for performing sensitivity studies.

The Iloeje model has been qualified and is generally applicable. Its use for the ESBWR calculations defined above is acceptable. The Shumway model was implemented to provide a more realistic assessment of Tmin for BWR/2-6 LOCA calculations and is recommended for these applications. Either the Iloeje or Shumway models can be used for ATWS and stability calculations since the key calculated parameters for these calculations are not sensitive to the calculated value of Tmin.

Affected Documents

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.

NRC RAI 21.6-91

Question Summary: TRACG Input decks.

Reviewer Summary: Provide the most recent version of all of your TRACG input decks with the next revision of the DCD. This should include input decks used for LOCA,AOOs, ATWS and stability.

GE Response

The following is a list of the LOCA, AOOs, Infrequent Events, ATWS, and Stability TRACG input decks files that were utilized in DCD Tier 2, Revision 02 and Revision 03. Furthermore this list includes specific steady state files and transient files for the limiting or highly relevant cases which results are incorporated into their corresponding DCD Tier 2 Revision 02 or Revision 03.

Revision 02:

LOCA (72 HRS.)	
File name	**Brief description**
MSL2_1DPVCB_L23NL-72.INP	Main Steam Line Break assuming a single failure of 1 depressurization valve without IC Heat Transfer, Bounding case.
MSL2_1DPV_L23NL-72.INP	Main Steam Line Break assuming a single failure of 1 depressurization valve without IC Heat Transfer, Nominal case.
FWL2_1SRV_NL-72.INP	Feedwater Line Break with 1 Safety relief Valve failure without IC Heat Transfer, Nominal case.
FWL2_1SRVCB_NL-72.INP	Feedwater Line Break with 1 Safety relief Valve failure without IC Heat Transfer, Bounding case.
GDL2_1DPV_NL-72.INP	Gravity Driven Line Break with 1 Depressurization Valve failure, Nominal case.
BDL2_1DPV_NL-72.INP	Bottom Drain Line Break with 1 Depressurization Valve failure, Nominal case.

LOCA (2000 s.)	
File name	**Brief description**
MSL2_1DPV.INP	Main Steam Line Break with failure of a single Depressurization Valve, focused on RPV Level, nominal conditions.
MSL2T_ 1SRV.INP	Main Steam Line Break with failure of a single Safety Relief Valve failure focused on RPV level, includes a 150 seconds timer delay for the squib valves, nominal conditions.
MSL2T_1INJ.INP	Main Steam Line Break with failure of a single GDCS injection valve, focused on RPV level, includes a 150 seconds timer delay for the squib valve, nominal conditions.
MSL2T_1DPVLB.INP	Main Steam Line Break with failure of a single Depressurization Valve, focused on RPV Level, includes bounding licensing conditions and GDC valves activated at the end of 150-second timer.
MSL2T_1SRVLB.INP	Main Steam Line Break with failure of a single Safety Relief Valve, focused on RPV Level, includes bounding licensing conditions and GDC valves activated at the end of 150-second timer.
MSL2T_1INJLB.INP	Main Steam Line Break with failure of a single GDCS injection valve focused on RPV Level includes bounding licensing conditions and GDC valves activated at the end of 150 second timer.
FWL2_1DPV.INP	Feedwater Line Break with failure of a single Depressurization Valve, focused on RPV Level, includes nominal conditions.
FWL2_1SRV.INP	Feedwater Line Break with failure of a single Safety Relief Valve, focused on RPV Level, includes nominal conditions.
FWL2_1INJ.INP	Feedwater Line Break with failure of a single GDCS injection valve focused on RPV Level, includes nominal conditions.
GDL2_1DPV.INP	Gravity Driven Injection Line Break with failure of a single Depressurization Valve, focused on RPV Level, includes nominal conditions.

GDL2_1SRV.INP	Gravity Driven Injection Line Break with failure of a single Safety Relief Valve, focused on RPV Level, includes nominal conditions.
GDL2_1INJ.INP	Gravity Driven Injection Line Break with failure of a single GDCS injection valve focused on RPV Level includes nominal conditions.
GDL2_1DPVLB.INP	Gravity Driven Injection Line Break with failure of a single Depressurization Valve, focused on RPV Level, includes bounding licensing conditions.
GDL2_1SRVLB.INP	Gravity Driven Injection Line Break with failure of a single Safety Relief Valve, focused on RPV Level, includes bounding licensing conditions.
GDL2_1INJLB.INP	Gravity Driven Injection Line Break with failure of a single GDCS injection valve, focused on RPV Level, includes bounding conditions.
BDL2_1DPV.INP	Bottom Drain Line Break with failure of a single Depressurization Valve, focused on RPV Level, includes nominal conditions.
BDL2_1SRV.INP	Bottom Drain Line Break with failure of a single Safety Relief Valve, focused on RPV Level, includes nominal conditions.
BDL2_1INJ.INP	Bottom Drain Line Break with failure of a single GDCS injection valve focused on RPV Level, includes nominal conditions.

AOOs:	
File name	**Brief description**
ESBWR_SS_DCD2_3X3ICSN.BDK	Basedeck for Transient Analyses in DCD Tier 2, Chapter 15 Rev. 2.

Revision 03:

LOCA (72 HRS.)	
File name	**Brief description**
MSL3_1DPVCB_NL2Pa-72.INP	Main Steam Line Break assuming a single failure of 1 depressurization valve without IC Heat Transfer, break at level 34, 2GDCS Vent Paths and Bounding Licensing conditions.
MSL3_1DPV_NL2p-72.INP	Main Steam Line Break assuming a single failure of 1 depressurization valve without IC Heat Transfer, break at level 34, 2GDCS Vent Paths and Nominal Licensing conditions.
FWL3_1SRVCB_NL2Pa-72.INP	Feedwater Line Break with 1 Safety relief Valve failure without IC Heat Transfer, 2GDCS Vent Paths and Bounding Licensing conditions.
FWL3_1SRV_NL2Pa-72.INP	Feedwater Line Break with 1 Safety relief Valve failure without IC Heat Transfer, 2GDCS Vent Paths and Nominal Licensing conditions.
GDL3_1DPV_NL2Pb-72.INP	Gravity Driven Line Break with 1 Depressurization Valve failure, 2GDCS Vent Paths and Nominal Licensing conditions.
BDL3_1DPV_NL2Pa-72.INP	Bottom Drain Line Break with 1 Depressurization Valve failure, 2GDCS Vent Paths and Nominal Licensing conditions.

AOOs:	These base decks include: _Detail channel grouping in region 10 _SRV capacity _Steam dome free volume and vessel top changed to a flat geometry _Water level set-down to 1 m. _ANS-1994 decay heat option 3 with 92 groups _TCV C1 initial and first constant block value changed _Modification PIRT227<1.0 for gap conductance has been deleted
WRAP UP files for AOO, Infrequent Events and Special Event: 4500_MOCN.WRP and 4500_EOCN.WRP	These wrap-up files are not included in the response to this RAI. These files were provided before.

AOO, Infrequent Events and Special Event steady-State Basedeck and their corresponding Kinetics Input Files for DCD Tier 2, Revision 3	**Description**
Basedeck1: SS_DCD3_3X3IC_EOC_40G.BDK 1132_EOC_D1R_SCRRIH_16G_R2.TOSDAT	Basedeck generated at EOC with 3 ICs, simplified SCRRI/SRI capability for transients with SCRAM and 3 ICs.
Basedeck2: SS_DCD3_4X4IC_MOC_40G.BDK 1132_MOC_D1R_SCRRIH_16G_R2.TOSDAT	Basedeck generated at MOC with 4 ICs (assumed no actuation) with cold water in the IC for the IICI transient. Also used for MOC transients with no IC actuation. Includes modifications from Basedeck 1.
Basedeck3: SS_DCD3_4X4IC_MOC_40G_3X1SL.BDK 1132_MOC_D1R_SCRRIH_16G_R2.TOSDAT	Basedeck generated at MOC with 4 ICs and one steam line modeled individually at the TCV. For transients in which the behavior of one TCV or MSIV is important.
Basedeck4: SS_DCD3_3X3IC_MOC_24G_L4_102.BDK 1132_MOC_D1R_SCRRIH_24G.TOSDAT	Basedeck generated at MOC with 3 ICs for loss of inventory transients with level at L4 (conservatively) and with reduced channel grouping.
Basedeck5: SS_DCD3_3X3IC_EOC_40G_T.BDK 1132_EOC_SCRRIH_16G16CB_R2_HCUF.TOSDAT	Basedeck generated at EOC with 3 ICs for loss of feedwater event with SCRRI/SRI with a single failure in the SRI.
Basedeck6: SS_DCD3_3X3IC_EOC_40G_102.BDK 1132_EOC_D1R_SCRRIH_16G_R2.TOSDAT	Basedeck generated at 102% power and EOC with 3 ICs for overpressure protection event.
Limiting AOO Event Input and their corresponding Kinetics Input for DCD Tier 2, Revision 3	
LFWHS_EOC_SRI-T2_HCUF.INP SRI_9GROUPS_GREENF_16CB-T2.TDT	Loss of feedwater heating (DCD Figure 15.2-1). Contains a single failure in SRI. Uses Basedeck5.
1TCVC_FAST_MOC.INP SCRAM_8GROUPS.TDT	Fast Closure of one Turbine Control Valve (DCD Figure 15.2-2). Uses Basedeck3.
LRHBP_EOC.INP SCRAM_PRES_8GROUPS.TDT	Generator load rejection with a single failure in the turbine bypass system (DCD Figure 15.2-5). Uses Basedeck1.
IICI_MOC_4NOZ.INP SCRAM_PRES_8GROUPS.TDT	Inadvertent isolation condenser initiation (DCD Figure 15.2-11). Uses Basedeck2.

Limiting Infrequent Event Input and their corresponding Kinetics Input for DCD Tier 2, Revision 3	
LFWHSF_MOC.INP SCRAM_8GROUPS.TDT	Loss of feedwater heating with SCRRI/SRI failure (DCD Figure 15.3-1). Uses Basedeck2.
LRNBP_EOC.INP SCRAM_PRES_8GROUPS.TDT	Generator load rejection with total turbine bypass failure (DCD Figure 15.3-5). Uses Basedeck1.
Limiting Special Event Input and their corresponding Kinetics Input for DCD Tier 2, Revision 3	
SBO_MOC_DCD3-0A2M.INP (0 – 2000 s, 3D Kinetics) SBO_MOC_DCD3-2MA12M.INP (Restart from 0A2M, 2000 – 12000 s) SBO_MOC_DCD3-12MA20M.INP (Restart from 2MA12M, 12000 – 20000 s) SCRAM_8GROUPS.TDT	Station blackout (DCD Figure 15.5-10). The SBO case is a compilation of three transient runs. The order of the runs is describe with the file names. (Use basedeck 4)
MSIVF_EOC_NOFW.INP SCRAM_PRES_8GROUPS.TDT	This is the updated overpressure event. The results of this event will be incorporated into DCD R4 (DCD Figure 5.2-4). It uses basedeck 6

ATWS **ATWS input files and their corresponding Kinetics Input File**	The following input files list is a partial list. Letter MFN 06-503 dated December 8, 2006 notifies the NRC that a correction needs to be made to some ATWS cases in the DCD due to a problem with the feedwater runback. The remainder input files will be provided at a later date.
File name	**Brief description**
WRAP UP file for ATWS cases: 4500_eocn.WRP	This wrap-up file is not included in the response to this RAI. This file was provided before.
ATWS_SS_EOC_LTR_AUTOFWRB.BDK 1132_EOC.TOSDAT	This basedeck was generated by assuming a Spring-Safety Valve (SSV) configuration, and includes the control system for the SRV function for the different transient conditions analyzed.

ATW_LCV_EOC_108NOMSRV_AUTOFWRB.INP 1132_MSIV_TOSDAT	LCV event; Bounding Containment Pool Temperature Case.
ATW_MSIV_EOC_108NOMSRV_AUTOFWRB.INP 1132_MSIV_TOSDAT	MSIV event, Bounding Containment Pool Temperature Case.
ATW_LCV_EOC_BOUND_AUTOFWRB.INP 1132_MSIV_TOSDAT	LCV event, Bounding Reactor Vessel Pressure Case.
ATW_MSIV_EOC_BOUND_AUTOFWRB.INP 1132_MSIV_TOSDAT	MSIV event, Bounding Reactor Vessel Pressure Case.

Stability: There were no changes in the input deck utilized and submitted for ESBWR stability. However for completeness the following input files from the ESBWR Stability Analysis which results are included in DCD Tier 2, appendix 4D and NEDE –33083P Supplement 1 (Reference 1) are included here.

Input Files:

1132_SS.BDK
1132C_SS.BDK
ESBWR_SS.BDK
ESBWR_STABILITY_BOC.BDK
ESBWR_STABILITY_EOCN.BDK
ESBWR_STABILITY_BOC_CHANNEL.BDK
ESBWR_STABILITY_BOC_SCHANNEL.BDK
ESBWR_STABILITY_EOC_CHANNEL.BDK
ESBWR_STABILITY_MOC_CHANNEL.BDK
ESBWRC_SS_BOC_REGIONAL.BDK
ESBWRG_SS_REGIONAL.BDK
ESBWRGC_SS_REGIONAL.BDK
ESBWRGC_STABILITY_REGIONAL.BDK
ESBWR_FWATER_TLOSS.BDK
ESBWR_FWATER_TLOSSC.BDK
ESBWR_FWATER_TLOSSC_STABILITY.BDK
ESBWR_FWATER_TLOSSC_STABILITY_CHAN.BDK
ESBWR_FWATER_LOSS.BDK
ESBWR_FWATER_LOSS_STABILITY.BDK
ESBWR_FWATER_LOSS_STABILITY_CHAN.BDK
ESBWR_STABILITY_MOCN.BDK.1
ESBWR_STABILITY_MOCN.BDK.2
ESBWR_STABILITY_MOCN.BDK.3
ESBWR_STABILITY_MOCN.BDK.4
ESBWR_STABILITY_BOC_REGIONAL.BDK.7
ESBWR_STABILITY_BOC_REGIONAL.BDK.8
5000.BDK
5000M.BDK
5000M_STABILITY.BDK

References:

1 General Electric Company, "TRACG Application for ESBWR Stability Analysis" NEDE- 33083P Supplement 1, B.S. Shiralkar, et al., December 2004

Affected Documents

Changes to DCD Tier 2, Figure 5.2-4 will be made in response to this RAI. Figure 5.2-4 will be updated based on the result of a TRACG analysis that uses the following input files: MSIVF_EOC_NOFW.INP and SCRAM_PRESS_8GROUPS.TDT.

Enclosure 2

MFN 07-256

Response to Portion of NRC Request for

Additional Information Letter No. 66

Related to ESBWR Design Certification Application

RAI Numbers 21.6-79 and 21.6-91

Contains GE Proprietary Information

PROPRIETARY INFORMATION NOTICE

This enclosure 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 proprietary information is in dark red font enclosed within double brackets. [[This sentence is an example.{3}]] Figures and large equation objects are enclosed in double brackets. Each page contains the designation "GE Proprietary Information." The superscript notation {3} refers to Paragraph (3) of the enclosed affidavit, which provides the basis for the proprietary determination.

[[Compact Disk "TRACG Input Deck Files"{3}]]

Enclosure 3

MFN 07-256

Affidavit

General Electric Company

AFFIDAVIT

I, James C. Kinsey, state as follows:

(1) I am Project Manager, ESBWR Licensing, 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 of GE letter MFN 07-256, Mr. James C. Kinsey to U.S. Nuclear Regulatory Commission, *MFN 07-256 – Response to Portion of NRC Request for Additional Information Letter No. 66 –RAI Numbers 21.6-79 and 21.6-91* dated May 17, 2007. The proprietary information is in Enclosure 2 "*MFN 07-256 – Response to Portion of NRC Request for Additional Information Letter No. 66 – Related to ESBWR Design Certification Application – RAI Numbers 21.6-79 and 21.6-91, Contains GE Proprietary Information*" contains the designation "GE Proprietary {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 identifies detailed GE ESBWR TRACG analysis models and methodology and represents a significant GE asset. The CD containing the input data files is entirely proprietary.

(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 17th day of May 2007.

James C. Kinsey

James C. Kinsey
General Electric Company