GE Nuclear Energy

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Project 717

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

Attention: Chief, Information Management Branch
Program Management
Policy Development and Analysis Staff

Reference: Letter S. Hucik, GE to S. Collins, NRC, Pre-application Review of ESBWR, dated April 18, 2002

Subject: **SBWR Testing Summary Report, NEDC-32606P, Revision 0 - Document Transmittal for Pre-Application Review of ESBWR**

The CD accompanying this letter contains the GE proprietary report NEDC-32606P, Rev 0, SBWR Testing Summary Report. This is item number 7 in Enclosure 1. This report covers a summary of the BWR passive system testing and the interrelations between tests. This report is submitted in support of the pre-application review of the ESBWR (Reference).

GE is seeking NRC concurrence on the adequacy of the testing program for the ESBWR. The testing program will be used to qualify the TRACG code for the one-time application for Design Certification of the ESBWR. The report NEDC-32606P, Revision 0, represents one of several reports that support the NRC review of the adequacy of the testing program. The ESBWR Design Description, NEDC- 33084P (Item 1, Enclosure 1) provides a description of the reference ESBWR design. ESBWR Test and Analysis Program Description (TAPD), NEDC-33079P, (Item 2, Enclosure 1) defines the necessary qualification program for the ESBWR. Test Reports for Passive Safety Systems (Item 8, Enclosure 1), which provide the details of various test programs, was transmitted to the NRC on August 16, 2002. Item 8 covers all previously submitted reports on the passive systems testing for SBWR. ESBWR Test Report, NEDC-33081P, Rev 0 covers ESBWR specific testing. The report ESBWR Scaling Report, NEDC-33082P (Item 11, Enclosure 1), completes the package. The NRC is requested to issue a single assessment on the adequacy of the ESBWR testing basis, based on the above referenced items.

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The report contains proprietary information of the type which GE maintains in confidence and withholds from public disclosure. The information has been handled and classified as proprietary to GE as indicated in the Enclosure 2 affidavit. GE hereby requests that this information be withheld from public disclosure in accordance with the provisions of 10CFR 2.790 and 9.17.

If you have any questions about the information provided here, please contact Atam Rao at (408) 925-1885, or myself.

Sincerely,

G. J.W. Deacon

Enclosures

(1) List of Reports in Support of ESBWR Pre-application Review
(2) GE Proprietary Information Affidavit

cc: A. Cubbage USNRC (with enclosures and CD)
J. Lyons USNRC (w/o enclosures)
G.B. Stramback - GE (with enclosures and CD)

Enclosure 1

List of Reports in Support of ESBWR Pre-application Review

1. ESBWR Design Description, NEDC-33084P
   Reference document that defines the ESBWR reference design – **not for review**.

2. ESBWR Test and Analysis Program Description (TAPD), NEDC 33079P
   A road map for the technology program that includes PIRT, adequacy of test program and TRACG qualification plan. A similar document was **reviewed for SBWR** and the **testing plan was found acceptable.**

3. TRACG Model Description.NEDE-32176P, Rev.2
   This report has been **reviewed and approved** for operating plants.

4. TRACG Qualification, NEDE-32177P, Rev.2. Comparisons for BWR Application of TRACG
   This report has been **reviewed and approved** for operating plants

5. TRACG Qualification for SBWR, NEDC-32725P, Rev.1, Vol.1 and 2.
   This report contains TRACG comparisons to test data covering extensive passive system testing that was described and found acceptable for SBWR.

6. TRACG Qualification for ESBWR, NEDC-33080P, Rev 0
   This report covers ESBWR specific testing and extends the passive system qualification of TRACG.

7. SBWR Testing Summary Report, NEDC-32606P, Rev 0
   This report covers a summary of all BWR passive system testing and interrelations between tests, that are discussed in detail in item 8 below.

8. Test Reports for Passive Safety Systems
   This covers all previously submitted reports on the passive systems testing for SBWR.

9. ESBWR Test Report, NEDC-33081P, Rev 0
   This report covers integral PCCS systems tests done for the ESBWR configuration. **New testing** done at PSI.

10. ESBWR Scaling Report, NEDC-33082P
    Addresses the scaling basis for passive safety systems test programs Based on previously **NRC reviewed SBWR** scaling report

11. TRACG Application for Anticipated Operational Occurrences Transient Analyses, NEDE-32906P
    This TRACG application methodology for BWR AOO transients was **reviewed and approved** by the NRC for operating plants.

12. TRACG Application for ESBWR, NEDC-33083P
    This covers the TRACG application approach for AOO transient, LOCA and containment analysis. Transient analysis based on approved operating plant application; others based on bounding approach.

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AFFIDAVIT

I, George B. Stramback, state as follows:

(1) I am Project Manager, Regulatory Services, 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 the GE proprietary report NEDC-32606P, *SBWR Testing Summary Report*, Class III (GE Proprietary Information), dated August 2002. The proprietary information is delineated by bars marked in the margin adjacent to the specific material.

(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), 2.790(a)(4), and 2.790(d)(1) for "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (Exemption 4). The material for which exemption from disclosure is here sought is all "confidential commercial information", and some portions 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 cost or price information, production capacities, budget levels, or commercial strategies of General Electric, its customers, or its suppliers;

d. Information which reveals aspects of past, present, or future General Electric customer-funded development plans and programs, of potential commercial value to General Electric;

e. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection. GE is pursuing patent applications in the US Patent Office.

The information sought to be withheld is considered to be proprietary for the reasons set forth in both paragraphs (4)a., (4)b., (4)d., and (4)e., above.

(5) 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 contains detailed test results and interpretations of testing performed in different facilities and their applicability t passive safety systems in BRW designs. The reporting, evaluation and interpretations of test results was achieved at a significant cost, on the order of several million dollars, to GE.

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 asset.

(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 29th day of August 2002.

George B. Stramback
General Electric Company