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Proj 710

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

Subject: **Submittal of GE Proprietary Licensing Report NEDC-33075P,  
“General Electric Boiling Water Reactor Detect and Suppress  
Solution – Confirmation Density,” July 2002**

The enclosed Licensing Topical Report (LTR) documents an enhanced solution for the automatic detection and suppression of stability related power oscillations and represents an evolutionary step from the present stability Long Term Solutions for Option III. The Detect and Suppress Solution – Confirmation Density (DSS-CD) introduces an enhanced detection algorithm, the Confirmation Density Algorithm (CDA), which reliably detects the inception of power oscillations and generates an early power suppression trip signal prior to any significant oscillation amplitude growth and Minimum Critical Power Ratio (MCPR) degradation.

This LTR documents the technical solution, which was conceptually introduced to the NRC in a meeting on March 27, 2002. This technical solution would apply to the MELLLA+ LTR (Reference 1), which GE is preparing Revision 1 for re-submittal per Reference 2. The MELLLA+ LTR will be revised to utilize this stability solution. This solution also can be used by other BWRs.

NRC review and approval of this LTR is requested to support both the MELLLA+ LTR (Rev. 1) and upcoming plant specific MELLLA+ submittals.

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

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NEDC-33075P  
Rec'd on CD  
Rom as Enclosure

If you have any questions about the information provided here please contact James Harrison at (408) 925-2253, or myself.

Sincerely,



George Stramback  
Regulatory Services, Project Manager  
GE Nuclear Energy  
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NRC Project No. 710

References:

1. MFN 02-003, Letter from Jim Klapproth (GE) to the NRC, *Submittal of GE Proprietary Licensing Topical Report NEDC-33006P, "General Electric Boiling Water Reactor Maximum Extended Load Line Limit Analysis Plus*, January 2002."
2. MFN 02-022, Letter from George Stramback (GE) to the NRC, *Request to Reschedule the Review of GE Proprietary Licensing Topical Report NEDC-33006P, "General Electric Boiling Water Reactor Maximum Extended Load Line Limit Analysis Plus," January 2002*, April 10, 2002

Enclosures:

- 1) NEDC-33075P, "General Electric Boiling Water Reactor Detect and Suppress Solution – Confirmation Density," July 2002
- 2) Affidavit by George B. Stramback, dated July 23, 2002

cc: AB Wang – USNRC  
JF Klapproth  
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# General Electric Company

## 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-33075P, *General Electric Boiling Water Reactor Detect and Suppress Solution – Confirmation Density*, Class III (GE Proprietary Information), dated July 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 has received US patent #6,173,026 covering this subject matter.

The information sought to be withheld is considered to be proprietary for the reasons set forth in both paragraphs (4)a., 4(b) 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 results of analytical models, methods and processes, including computer codes, which GE has developed, and applied to perform stability evaluations using the detection and suppression capability of the confirmation density algorithm for the BWR.

The development of the detection and suppression capability of the confirmation density algorithm for the BWR was achieved at a significant cost, in excess of ¼ 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.

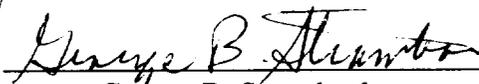
The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

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 23rd day of July 2002.

  
George B. Stramback  
General Electric Company