



**James F. Klapproth**  
Manager, Engineering and Technology

Nuclear Services  
General Electric Company  
175 Curtner Avenue, MC 706, San Jose, CA 95125-1088  
408 925-5434, Fax: 408 925-3837  
james.klapproth@gene.ge.com

MFN 02-003  
January 15, 2002

Document Control Desk  
US Nuclear Regulatory Commission  
Washington, DC 20555

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

Subject: **Submittal of GE Proprietary Licensing Topical Report NEDC-33006P,  
"General Electric Boiling Water Reactor Maximum Extended Load  
Line Limit Analysis Plus," January 2002**

The enclosed Licensing Topical Report (LTR) documents the basis and approach for licensing an expanded core flow operating range for GE Boiling Water Reactor (BWR) plants. The expanded operating range is designed to enable plants that have increased their licensed power level to be operated much more effectively with less than rated core flow. The improved operating range is identified as Maximum Extended Load Line Limit Analysis Plus (MELLLA+).

NRC review and approval of this LTR is requested to support upcoming plant-specific MELLLA+ submittals. The plant specific MELLLA+ safety analysis report (M+SAR) will follow the same structure and content as this LTR, which is based on the generic Constant Pressure Power Uprate LTR (CLTR). Similar to the CLTR, both generic and plant specific dispositions of the evaluation topics are used to characterize the MELLLA+ evaluation scope.

There are generic BWR stability issues that have not been resolved and are currently being addressed. The stability area is recognized as important to the implementation of MELLLA+. Therefore, the generic assessment of stability for MELLLA+ is deferred until the generic stability issues are resolved. Until then, plant-specific stability evaluations will be provided to support MELLLA+ submittals. The MELLLA+ LTR will be revised when the generic issues are resolved.

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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 as 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.

Sincerely,



J.F. Klapproth, Manager  
Engineering and Technology  
GE Nuclear Energy  
(408) 925-5434  
james.klapproth@gene.ge.com

Enclosures:

- 1) Affidavit by David J. Robare, dated January 14, 2002.
- 2) NEDC-33006P, "Licensing Topical Report, General Electric Boiling Water Reactor Maximum Extended Load Line Limit Analysis Plus," January 2002

Cc: J.E. Donoghue (NRC)  
P. T. Tran (GE)  
G. A. Watford (GNF-A)

# General Electric Company

## AFFIDAVIT

**I, David J. Robare, being duly sworn, depose and state as follows:**

- (1) I am Technical Projects Manager, 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-33006-P, *Licensing Topical Report, General Electric Boiling Water Reactor Maximum Extended Load Line Limit Analysis Plus*, Class III (GE Company Proprietary Information), dated January 2002. This document, taken as a whole, constitutes a proprietary compilation of information, some of it also independently proprietary, prepared by the General Electric Company. The independently proprietary elements are 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.

Both the compilation as a whole and the marked independently proprietary elements incorporated in that compilation are considered proprietary for the reason described in items (4)a. and (4)b., above.

- (5) The information sought to be withheld is being submitted to NRC in confidence. That information (both the entire body of information in the form compiled in this document, and the marked individual proprietary elements) is of a sort customarily held in confidence by GE, and has, to the best of my knowledge, consistently been held in confidence by GE, has not been publicly disclosed, and 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 by bars in the margin is classified as proprietary because it contains detailed results and conclusions from these evaluations, utilizing analytical models and methods, including computer codes, which GE has developed, obtained NRC approval of, and applied to perform evaluations of transient and accident events in the GE Boiling Water Reactor ("BWR"). The development and approval of these system, component, and thermal hydraulic models and computer codes was achieved at a significant cost to GE, on the order of several million dollars.

The remainder of the information identified in paragraph (2), above, is classified as proprietary because it constitutes a confidential compilation of information, including detailed results of analytical models, methods, and processes, including computer codes, and conclusions from these applications, which represent, as a whole, an integrated process or approach which GE has developed, obtained NRC approval of, and applied to perform evaluations of the safety-significant changes necessary to demonstrate the regulatory acceptability for the expanded power/flow range of MELLLA+ for a GE BWR. The development and approval of this overall approach was achieved at a significant additional cost to GE, in excess of a million dollars, over and above the very large cost of developing the underlying individual proprietary analyses.

To effect a change to the licensing basis of a plant requires a thorough evaluation of the impact of the change on all postulated accident and transient events, and all other regulatory requirements and commitments included in the plant's FSAR. The analytical process to perform and document these evaluations for was developed at a substantial investment in GE resources and expertise. The results from these evaluations identify those BWR systems and components, and those postulated events, which are impacted by the changes required to accommodate operation at an expanded power/flow range, and, just as importantly, those which are not so impacted, and the technical justification for not considering the latter in changing the licensing basis. The scope thus determined forms the basis for GE's offerings to support utilities in both performing analyses and providing licensing consulting services. Clearly, the scope and magnitude of effort of any attempt by a competitor to effect a similar licensing change can be narrowed considerably based upon these results. Having invested in the initial evaluations and developed the solution strategy and process described in the subject document GE derives an important competitive advantage in selling and performing these services. However, the mere knowledge of the impact on each system and component reveals the process, and provides a guide to the solution strategy.

- (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 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, including justifications for not including certain analyses in applications to change the licensing basis.

GE's competitive advantage will be lost if its competitors are able to use the results of the GE experience to avoid fruitless avenues, or to normalize or verify their own process, or to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions. In particular, the specific areas addressed by any document and submittal to support a change in the safety or licensing bases of the plant will clearly reveal those areas where detailed evaluations must be performed and specific analyses revised, and also, by omission, reveal those areas not so affected.

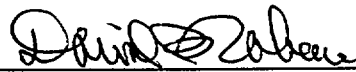
While some of the underlying analyses, and some of the gross structure of the process, may at various times have been publicly revealed, enough of both the analyses and the detailed structural framework of the process have been held in confidence that this information, in this compiled form, continues to have great competitive value to GE. This value would be lost if the information as a whole, in the context and level of detail provided in the subject GE document, were to be disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources, including that required to determine the areas that are not affected by an expanded power flow range and are therefore blind alleys, 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 its analytical process.

STATE OF CALIFORNIA       )  
                                      )  
COUNTY OF SANTA CLARA    )       ss:

David J. Robare, being duly sworn, deposes and says:

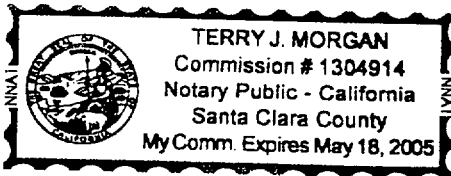
That he has read the foregoing affidavit and the matters stated therein are true and correct to the best of his knowledge, information, and belief.

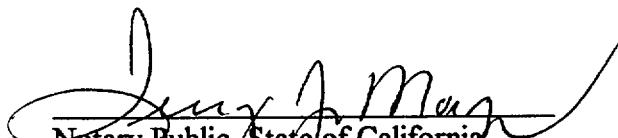
Executed at San Jose, California, this 14<sup>TH</sup> day of JANUARY 2002.



David J. Robare  
General Electric Company

Subscribed and sworn before me this 14<sup>th</sup> day of January 2002.



  
Notary Public, State of California