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October 26, 2000

MFN 00-040

U.S Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

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

Subject: **Transmittal of GE Proprietary Licensing Topical Report, NEDC-32992P,  
"ODYSY Application for Stability Licensing Calculations," October 2000**

References:

1. NRC Letter, Stephen Dembeck to Stuart Richards, "Summary of Meeting with General Electric Nuclear Energy Regarding Application of ODYSY Code for Stability Licensing Calculations," August 16, 2000.
2. NEDO-31960-A, "BWR Owners' Group Long-Term Stability Solution Licensing Methodology," November 1995.
3. NEDC-32339P-A, Supplement 1, "Reactor Stability Long-Term Solution: Enhanced Option I-A, ODYSY Application to E1A," December 1996.
4. NRC/BWROG Letter, Timothy E. Collins to L.A., England, Request for Additional Information for GE Topical Report NEDC-32339P, Supplement 1 (TAC No. 89222)," June 1, 1994.
5. BWROG/NRC Letter, R. A. Pinelli to Robert C. Jones, "Response to NRC Request for Additional Information on GE Topical Report, NEDC-32339P, Supplement 1," November 9, 1994.

This letter transmits GE Proprietary Licensing Topical Report (LTR) NEDC-32992P, "ODYSY Application for Stability Licensing Calculations," dated October 2000. As previously discussed with the NRC Staff (Reference 1), GE is seeking approval of ODYSY for all stability licensing calculations for which the FABLE code currently is approved (Reference 2).

ODYSY has been previously approved for application to stability solution Enhanced Option I-A (E1A), except for the E1A Standard Cycle calculation which continued to use FABLE (Reference 3). During the E1A review, a NRC Request for Additional Information (RAI) was received (Reference 4). This requested information was provided to the staff in Reference 5. These documents represent related background material that should be considered in this request for staff approval of ODYSY.

The current request is to approve use of ODYSY for stability licensing exclusion region calculations for stability solution Options I-D, II, and the E1A Standard Cycle. In addition,

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approval is requested for use of ODYSY for new fuel licensing calculations in accordance with GESTAR II (NEDE-24011-P-A) fuel licensing requirements.

A key element of the requested approval is the specification of an ODYSY application procedure such that the exclusion regions defined by ODYSY are comparable to the previous FABLE procedure results to the extent practicable. Exact duplication is not possible because of the substantial modeling improvements in ODYSY which eliminate the need for empirical adjustments as currently used to improve the accuracy of FABLE calculations. In addition, ODYSY has the capability to model advanced fuel designs with axially varying geometry and to perform exposure dependent decay ratio calculations.

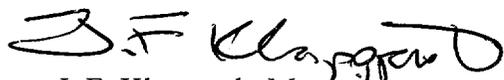
An expedited NRC review of the subject LTR is needed to support review of the Duane Arnold extended power uprate application and Duane Arnold Cycle 18 Supplemental Reload Licensing Report. It is expected that an expedited review will be possible because of the following factors:

- The NRC has previously reviewed ODYSY for stability solution E1A,
- ODYSY is an improved frequency domain model compared to the currently approved method, and
- An application procedure is specified that provides results comparable to the previous method's results to the extent practicable.

Please note that this LTR contains information of the type which the General Electric Company (GE) maintains in confidence and withholds from public disclosure. The information has been handled and classified as proprietary to GE as indicated in the attached affidavit. We hereby request that this information be withheld from public disclosure in accordance with the provisions of 10CFR2.790.

Should you have any questions concerning the subject document, please contact Jason Post at (408) 925-5363 ([jason.post@gene.ge.com](mailto:jason.post@gene.ge.com)).

Sincerely,



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Attachments: 1. Affidavit, George B. Stramback, dated October 25, 2000  
2. NEDE-32992P, Application of ODYSY for Stability Licensing Calculations, dated October 2000 (16 copies)

cc: R. Caruso (NRC)  
R. M. Pulsifer (NRC)  
A. Ulses (NRC)  
J. Wermiel (NRC)

# General Electric Company

## AFFIDAVIT

I, **George B. Stramback**, being duly sworn, depose and 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-32992P, *ODSYS Application for Stability Licensing Calculations*, Class 3 (GE Proprietary Information), dated October 2000. 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.

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 the application of computer codes, which GE has developed, obtained NRC approval of, and applied to perform reactor stability licensing calculations for the BWR.

The development and approval of the BWR frequency domain computer codes used in this analysis was achieved at a significant cost, on the order of a 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.

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

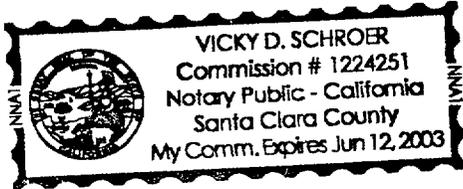
George B. Stramback, being duly sworn, deposes and says:

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 25<sup>th</sup> day of October 2000.

George B. Stramback  
George B. Stramback  
General Electric Company

Subscribed and sworn before me this 25<sup>th</sup> day of October 2000.



Vicky D. Schroer  
Notary Public, State of California