

# GENERAL ELECTRIC

NUCLEAR POWER

SYSTEMS DIVISION  
MFN-176-82

GENERAL ELECTRIC COMPANY, 175 CURTNER AVE., SAN JOSE, CALIFORNIA 95125  
MC 682, (408) 925-3392

November 19, 1982

U. S. Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation  
Division of Licensing  
Washington, DC 20555

Attention: D. B. Vassallo, Chief  
Operating Reactors Branch No. 2

Gentlemen:

SUBJECT: LOW LOW SET LOGIC/LOWERED MSIV FOR MARK I PLANTS

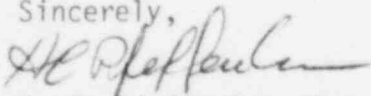
This letter transmits material describing a typical low low set logic for a Mark I plant as well as an evaluation of the impact of the low low set logic and lower MSIV water level trip on transients and accidents. This material, requested by the NRC staff at the NRC/Mark I Owners' meeting on September 9, 1982, is being submitted on behalf of the Mark I Owners' Group.

The attached design description includes elementary diagrams and functional control drawings which are typical of that used on all Mark I plants. While each plant may differ slightly, this material should provide sufficient information to demonstrate the treatment of single failure in the generic design approach.

The generic evaluation of impact of the low low set logic and lower MSIV water level trip on transients and accidents considered all the transients and accidents defined in Chapter 15 of the FSAR. This evaluation demonstrates that implementation of these changes will not result in any unacceptable safety impact.

The information contained in this material is of the type which General Electric maintains in confidence and withholds from public disclosure. An affidavit attesting to its proprietary nature is attached.

Sincerely,



H. C. Pfefferlen, Manager  
BWR Licensing Programs  
Nuclear Safety & Licensing Operation

HCP:pes/103F

cc: L. S. Gifford (GE Bethesda) w/o attachment  
B. Seigel (NRC)

X601  
change:  
PDR 1 E  
LPDR 1 NP  
NTS 1 NP  
NSIC 1 NP

GENERAL ELECTRIC COMPANY

AFFIDAVIT

I, Glenn G. Sherwood being duly sworn, depose and state as follows:

1. I am Manager, Nuclear Safety & Licensing Operation 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 described in the letter transmitting this affidavit. It consists of elementary diagrams and functional control drawings of the low low jet logic design and an evaluation of the impact of these changes on transients and accidents.
3. In designating material as proprietary, General Electric utilizes the definition of proprietary information and trade secrets set forth in the American Law Institute's Restatement of Torts, Section 757. This definition provides:

"A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business and which gives him an opportunity to obtain an advantage over competitors who do not know or use it.... A substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring information.... Some factors to be considered in determining whether given information is one's trade secret are: (1) the extent to which the information is known outside of his business; (2) the extent to which it is known by employees and others involved in his business; (3) the extent of measures taken by him to guard the secrecy of the information; (4) the value of the information to him and to his competitors; (5) the amount of effort or money expended by him in developing the information; (6) the ease or difficulty with which the information could be properly acquired or duplicated by others."

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 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 consisting of supporting data and analyses, including test data, relative to a process, method or apparatus, the application of which provide a competitive economic advantage, e.g., by optimization or improved marketability;

- c. 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;
  - d. Information which reveals cost or price information, production capacities, budget levels or commercial strategies of General Electric, its customers or suppliers;
  - e. Information which reveals aspects of past, present or future General Electric customer-funded development plans and programs of potential commercial value to General Electric;
  - f. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection;
  - b. Information which General Electric must treat as proprietary according to agreements with other parties.
5. In addition to proprietary treatment given to material meeting the standards enumerated above, General Electric customarily maintains in confidence preliminary and draft material which has not been subject to complete proprietary, technical and editorial review. This practice is based on the fact that draft documents often do not appropriately reflect all aspects of a problem, may contain tentative conclusions and may contain errors that can be corrected during normal review and approval procedures. Also, until the final document is completed it may not be possible to make any definitive determination as to its proprietary nature. General Electric is not generally willing to release such a document to the general public in such a preliminary form. Such documents, however, on occasion furnished to the NRC staff on a confidential basis because it is General Electric's belief that it is in the public interest for staff to be promptly furnished with significant or potentially significant information. Furnishing the document on a confidential basis pending completion of General Electric's internal review permits early acquaintance of the staff with the information while protecting General Electric's potential proprietary position and permitting General Electric to insure the public documents are technically accurate and correct.
6. Initial approval of proprietary treatment of a document is made by the Subsection Manager of the originating component, the man most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within the Company is limited on a "need to know" basis and such documents at all times are clearly identified as proprietary.
7. The procedure for approval of external release of such a document is reviewed by the Section Manager, Project Manager, Principal Scientist and other equivalent authority, by the Section 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 in accordance with the standards enumerated above. Disclosures

outside General Electric are generally limited to regulatory bodies, customers and potential customers and their agents, suppliers and licensees only in accordance with appropriate regulatory provisions or proprietary agreements.

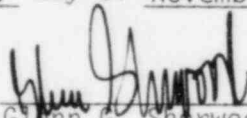
8. The document mentioned in paragraph 2 above has been evaluated in accordance with the above criteria and procedures and has been found to contain information which is proprietary and which is customarily held in confidence by General Electric.
9. Public disclosure of the information sought to be withheld is likely to cause substantial harm to the competitive position of the General Electric Company and deprive or reduce the availability of profit making opportunities. This material contains design details of the low low jet logic offered by General Electric as well as a safety evaluation which would cost on the order of \$100,000 to reproduce.

STATE OF CALIFORNIA        )  
COUNTY OF SANTA CLARA    )    ss:

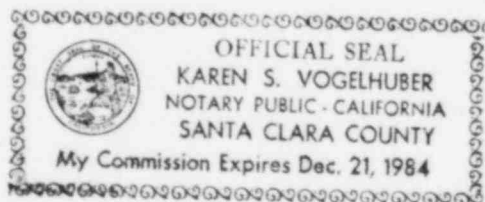
Glenn G. Sherwood, being duly sworn, deposes and says:

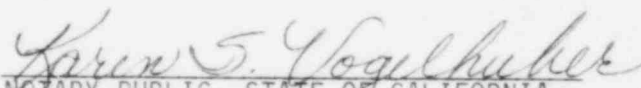
That he has read the foregoing affidavit and the matters stated therein are true and correct to the best of his knowledge, information, and belief.

Executed at San Jose, California, this 19 day of November, 1982.

  
\_\_\_\_\_  
Glenn G. Sherwood  
General Electric Company

Subscribed and sworn before me this 19 day of November, 1982.



  
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NOTARY PUBLIC, STATE OF CALIFORNIA

HFP:pes:pab/103G  
11/15/82