Nebraska Public Power District

COOPER NUCLEAR STATION
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CNSS885533

January 21, 1988

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Lead Test Assembly Information Submittal
Cooper Nuclear Station
NRC Docket No. 50-298, DPR-46

Reference: Letter, T. A. Ippolito (NRC) to R. E. Engel (G.E.) dated September 23, 1981, "Lead Test Assembly Licensing".

Gentlemen:

For the purpose of simplifying the licensing of Lead Test Assemblies (LTAs), in the above Reference the NRC approved the licensing approach whereby the involved utility submits an information letter to the NRC describing the unique features of the LTAs, the objectives of the LTAs, and the kinds of tests to be performed. As long as the analyses of the LTAs, using approved methods, meets approved criteria, it would be concluded that no unreviewed safety question exists. The LTAs would then be included in reload licensing analyses and licensing documentation.

Nebraska Public Power District plans to load four (4) fuel assembly LTAs and two (2) control rod LTAs as part of Cooper Nuclear Station Reload 11. The information contained in Attachments 1, 2, and 4 provides a description of these LTAs and confirms the applicability of NRC approved methods. Please note that some of the information contained in Attachments 2 and 4 is proprietary to General Electric. Affidavits attesting to the General Electric proprietary status of the information are contained in Attachments 3 and 5.

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We hereby request that this information be withheld from public disclosure in accordance with the provisions of 10CFR2.790.

If you have any questions, please call.

G. A. Trevors
Division Manager
Nuclear Support

GAT/GRS/sg

Attachments

cc: U.S. Nuclear Regulatory Commission
Region IV Office
Arlington, TX

NRC Resident Inspector
Cooper Nuclear Station

ATTACHMENT 5

GENERAL ELECTRIC COMPANY

AFFIDAVIT

I, Rudolph Villa, being duly sworn, depose and state as follows:

1. I am Manager, Consulting Services, General Electric Company, 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 report F&PMT87-178-040 "General Electric Material Test Control Rod Lead Test Assembly" dated December 1987.

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 expanded by him in developing the information; (6) the ease or difficulty with the 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;

g. 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 bee 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 complete 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 in such a preliminary form. Such documents are, 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 the 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 typically made by the Subsection manager of the originating component, who is 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 are clearly identified as proprietary.

7. The procedure for approval of external release of such a document typically requires review by the Subsection Manager, Project Manager, Principal Scientist or other equivalent authority, by the Subsection Manager of the cognizant Marketing function (or 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 then only with appropriate protection by applicable 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. The document mentioned in paragraph 2 above has been classified as proprietary because it contains information of GE control rod design methods and materials. Considerable expenditure of resources would be required to duplicate this information.

10. The information to the best of my knowledge and belief has consistently been held in confidence by the General Electric Company, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties have been made pursuant to regulatory provisions of proprietary agreements which provide for maintenance of the information in confidence.

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) ss:

Rudolph Villa, 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 14th day of January 1988.

Rudolph Villa

Rudolph Villa
General Electric Company

Subscribed and sworn before me this 14th day of January 1988.

OFFICIAL SEAL
PAULA F HUSSEY
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY

Paula F. Hussey

NOTARY PUBLIC, STATE OF CALIFORNIA

ATTACHMENT 1

LEAD TEST ASSEMBLY LICENSING

1. BACKGROUND

Nebraska Public Power District (NPPD) plans to load four (4) Lead Test Assemblies (LTAs) as part of Cooper Nuclear Station Reload 11. The loading and operation of these LTAs will not be different from that of the other Reload 11 bundles.

This report contains information that must be provided to the NRC in compliance with Reference 1. Included in this report are a description of the LTAs, discussion of the applicability of approved methods to the licensing analyses, a description of the objectives of this LTA program, and an outline of the kinds of measurements planned for the LTAs.

2. LTA DESCRIPTION

A description of the LTAs is contained in Attachment 2.

3. LICENSING ANALYSES

The Cooper Reload 11 LTAs have been analyzed using the NRC approved methods described in Reference 2. The analyses demonstrate that the LTAs will operate within all the design and safety limits specified in Reference 2. Further, licensing analyses will be performed prior to each cycle of their operation, wherein the effect of the LTAs is considered for each of the appropriate licensing events and transients to confirm appropriate reactor core thermal limits for operation. The Cooper Reload 11 core will be designed such that the LTAs will not be the most limiting fuel assemblies in the core at any time during their residence in the core.

NPPD intends to utilize the provisions of 10CFR50.59 to license Reload 11. The Reload 11 licensing analyses confirm that the operating limit MCPR and LHGR limit provided in the Cooper Technical Specifications for the P8X8R fuel are conservatively applicable to the LTAs, and that the MAPLHGR limits for the BP8DRB265L bundle are conservatively applicable to the LTAs.

The use of approved methods to analyze the events and accidents for Reload 11 including the LTAs is described below. According to Reference 1, as long as the analysis of the LTAs using approved methods meets the approved criteria, it would be concluded that no unreviewed safety question exists.

3.1 CORE-WIDE TRANSIENTS

Current approved methods described in Reference 2 are appropriate to determine the impact of core-wide transients on the LTAs. No credit is taken in the transient analyses for any of the design improvements included in the LTAs.

3.2 LOCALIZED TRANSIENTS

Approved methods are considered adequate to evaluate the core response, including LTAs, to the Rod Withdrawal Error (RWE). The Misoriented (Rotated) Bundle Loading Error is not analyzed for the LTA because special additional surveillance of the LTAs will be performed to preclude a rotated bundle.

3.3 CONTROL ROD DROP ACCIDENT (CRDA)

CRDA has been analyzed using approved methods. Operation with the LTAs will not result in exceeding CRDA criteria.

4. LTA PROGRAM OBJECTIVES

The objective of the Cooper Reload 11 LTAs is to confirm the expected performance of the design improvements included in the LTAs prior to the use of these features on a standard production basis.

5. LTA MEASUREMENTS

In order to confirm that the LTAs are performing as expected, GE currently plans to conduct an inspection of at least one LTA after each cycle of operation. This inspection will consist of a visual inspection of the channel and fuel bundle, and dimensional measurements of the channel for the purpose of characterizing the amount of bow and bulge that occurred during operation. The extent of these measurements will be governed by the need to minimize the impact of such testing on refueling outage critical path.

Results obtained from this LTA program will be summarized in a timely manner in subsequent GE Fuel Experience Reports.

6. REFERENCES

1. Letter, T.A. Ippolito (NRC) to R.E. Engel (GE), "Lead Test Assembly Licensing," September 23, 1981

2. "General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A-8 and NEDE-24011-P-A-8-US, May 1986