Alabama Power Company 40 Inverness Center Parkway Post Office Box 1295 Birmingham, Alabama 35201 Telephone 205 868-5581

W. G. Hairston, III Senior Vice President Nuclear Operations

January 31, 1991



Docket No. 50-348

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

Gentlemen:

Joseph M. Farley Nuclear Plant - Unit 1 NRC Bulletin No. 88-11 Pressurizer Surge Line Thermal Stratification

By letter dated March 3, 1989, Alabama Power Company requested an alternate schedule to that requested in Bulletin 88-11. A schedule of two years from receipt of the Bulletin was requested to obtain the necessary additional monitoring data, define thermal transients, perform all required analyses and update the stress and fatigue analyses to ensure compliance with applicable code and regulatory requirements. The requested schedule, though different from that stated in action 1.b of Bulletin 88-11, was consistent with the requirement to update the stress and fatigue analyses within two years as stated in action 1.d of the Bulletin.

Westinghouse has performed a stress and fatigue analysis for Alabama Power Company of the Unit 1 pressurizer surge line including the effects of thermal stratification and striping. The results of the analysis are contained in the enclosed WCAP from Westinghouse. The existing surge line configurations for both units have been analyzed by this WCAP. The analysis indicates contact between the pipe and the pipe whip restraints on Unit 1. Even with this contact, the analysis has determined that Unit 1 pipe stress and the code fatigue cumulative usage factor are within the code allowables.

It is Alabama Power Company's intent to develop a leak-before-break (LBB) analysis for the Unit 1 surge line to allow the removal of the pipe whip restraints and thus eliminate the contact with the piping. The results of that analysis will be submitted to the NRC for approval in accordance with GDC 4 within the next three months. After NRC review and approval of the LBB analysis, Alabama Power Company will remove the postulated pipe rupture of the surge line from the design basis. Alabama Power Company currently plans on removing the whip restraints within two refueling outages following LBB approval.

The results of this plant specific analysis on Unit 1 demonstrates acceptance to the requirements of the ASME Code Section III, including both stress limits and fatigue usage, for the full licensed life of the unit. The enclosed report completes the response to NRC Bulletin 8° 1 for Farley Unit 1.

9102060385 910131 PDR ADOCK 05000348 U. S. Nuclear Regulatory Commission Page 2 ATTN: Document Control Desk Enclosures contain: WCAP-12855 - Structural Evaluation of the Farley Units 1 and 2 Pressurizer Surge Lines, Considering the Effects of Thermal Stratification (Proprietary). WCAP-12856 - Structural Evaluation of the Farley Units 1 and 2 Pressurizer Surge Lines, Considering the Effects of Thermal Stratification (Non-Proprietary). Also enclosed are a Westinghouse authorization letter, CAW-91-122, accompanying affidavit, Proprietary Information Notice, and Copyright Notice. As WCAP 12855 contains information proprietary to Westinghouse Electric Corporation, it is supported by an affidavit signed by Westinghouse, the owner of the information. The aftidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.790 of the Commission's regulations. Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.790 of the Commission's regulations. Correspondence with respect to the copyright or proprietary aspects of the

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse Affidavit should reference CAW-91-122 and should be addressed to R. P. DiPiazza, Manager, Operating Plant Licensing Support, Westinghouse Electric Corporation, P. O. Eox 355, Pittsburgh, Pennsylvania 15230-0355.

The provided herein is true to the best of my knowledge and belier. If you have any questions, please advise.

Respectfully submitted,

ALABAMA POWER COMPANY

W. G. Hairston, III

WGH, III/JGS: maf2216 Enclosures

Mr. S. D. Ebneter Mr. S. T. Hoffman Ma. G. Maxwell SWORN TO AND SUBSCRIBED BEFORE ME

THIS 3/5+ DAY OF_

1991.

Notary Public

MY COMMISSION EXPIRES SEPT 14, 1998



Westinghouse Electric Corporation **Energy Systems**

Box 355 Pittsburgh Pennsylvania 15230-0355

January 29, 1991 CAW-91-122

Document Control Desk US Nuclear Regulatory Commission Washington, DC 20555

Attention: Dr. Thomas Murley, Director

APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE

Subject: "Structural Evaluation of the Farley Units 1 and 2 Pressurizer Surge Lines, Considering the Effects of Thermal Stratification" (WCAP-12855)

Dear Dr. Murley:

The proprietary information for which withholding is being requested in the above-referenced letter is further identified in Affidavit CAW-91-122 signed by the owner of the proprietary information, Westinghouse Electric Corporation. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.790 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying Affidavit by Alabama Power Company.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-91-122, and should be addressed to the undersigned.

Very truly yours,

Enclosures

A. P. DiPiazza, Manager Operating Plant Licensing Support

cc: C. M. Holzle, Esq.
Office of the General Counsel, NRC

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Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.790 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets—and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (g) contained within parentheses located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(g) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.790(b)(1).

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance. denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.790 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection not withstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. The NRC is not authorized to make copies for the personal use of members of the public who make use of the NRC public document rooms. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared Ronald P. DiPiazza, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Corporation ("Westinghouse") and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

Ronald P. Dipiazza, Manager

Operating Plant Licensing Support

Sworn to and subscribed before me this 30 day of January, 1991.

Forime M. Polica

Notary Public

NOTARIAL SEAL
LORRAINE M. PIPLICA, NOTARY PUBLIC
MONROEVILLE BORO. ALLEGHENY COUNTY
MY COMMISSION EXPIRES DEC. 14, 1991

Meriber Pennsylvania Association of Natures

- (1) I am Manager, Operating Plant Licensing Support, in the Nuclear and Advanced Technology Division, of the Westinghouse Electric Corporation and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from polic disclosure in connection with nuclear power plant licensing and rulemaking proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Energy Systems Business Unit.
- (2) I am making this Affidavit in conformance with the provisions of 10CFR Section 2.790 of the Commission's regulations and in conjunction with the Westinghouse application for withholding accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by the Westinghouse Energy Systems Business Unit in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.

- (1) I am Manager, Operating Plant Licensing Support, in the Nuclear and Advanced Technology Division, of the Westinghouse Electric Corporation and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rulemaking proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Energy Systems Business Unit.
- (2) I am making this Affidavit in conformance with the provisions of 10CFR Section 2.790 of the Commission's regulations and in conjunction with the Westinghouse application for withholding accompanying this Affidavit.
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- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.

(ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.
- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.

- (c) Its use 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 a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.
- (g) It is not the property of Westinghouse, but must be treated as proprietary by Westinghouse according to agreements with the owner.

There are sound policy reasons behind the Westinghouse system which include the following:

(a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.

CAW-91-122

- (b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.
- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
- (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
- (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.

- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10CFR Section 2.790, it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in "Structural Evaluation of the Farley Units 1 and 2 Pressurizer Surge Lines, Considering the Effects of Thermal Stratification", WCAP-12855, (Proprietary) for Joseph M. Farley Units 1 and 2, being transmitted by the Alabama Power Company (APCo) letter and Application for Withholding Proprietary Information from Public Disclosure, Mr. W. G. Hairston III, APCo, to Document Control Desk, to the Attention Dr. Thomas Murley, January, 1991. The proprietary information as submitted for use by Alabama Power Company for the J. M. Farley Units 1 and 2 is expected to be applicable in other licensee submittals in response to certain NRC requirements for pressurizer surge line structural evaluations including thermal stratification effects.

This information is part of that which will enable Westinghouse to:

- (a) Provide documentation of the methods for structural evaluations of pressurizer surge line.
- (b) Establish applicable analytical technologies.
- (c) Establish the transient and temperature profiles.
- (d) Establish the applicable codes and standards which are to be applied.
- (d) Assist the customer to obtain NRC approval.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for purposes of meeting NRC requirements for licensing documentation.
- (b) Westinghouse can sell support and defense of the technology to its customers in the licensing process.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar sleeving services and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended for developing testing and analytical methods and performing tests.

Further the deponent sayeth not.