Westinghouse Electric Corporation
Water Reactor Divisions
Box 355
Pittsburgh Pennsylvania 15230-0355

AW-85-028
April 1, 1985

Dr. Cecil O. Thomas, Chief
Standardization and Special Projects Branch
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE

SUBJECT: Responses to Request for Additional Information on "Westinghouse Reload Safety Evaluation Methodology", WCAP-9272 (Proprietary) and WCAP-9273 (Non-Proprietary)

REFERENCE: Westinghouse Letter Number NS-NRC-85-3027, Rahe to Thomas, dated April 1, 1985

Dear Dr. Thomas:

This application for withholding is submitted by Westinghouse Electric Corporation ("Westinghouse") pursuant to the provisions of paragraph (b) (1) of Section 2.790 of the Commission's regulations. It contains commercial strategic information proprietary to Westinghouse and customarily held in confidence.

The affidavit previously provided to justify withholding proprietary information in this matter was submitted as AW-76-31 dated July 23, 1976 and is equally applicable to this material.

Accordingly, it is respectfully requested that the subject information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10CFR Section 2.790 of the Commission's regulations.

Correspondence with respect to this application for withholding or the accompanying affidavit should reference AW-85-028 and should be addressed to the undersigned.

Very truly yours,

Robert A. Wiesemann, Manager
Regulatory & Legislative Affairs

/kk
cc: E. C. Shomaker, Esq.
Office of the Executive Legal Director, NRC

AW-76-31

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared Robert A. Wiesemann, 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:

Robert A. Wiesemann

Robert A. Wiesemann, Manager
Licensing Programs

Sworn to and subscribed
before me this 3 day
of July 1976.

Notary Public

NOTARIAL SEAL
ALLEGHENY COUNTY
MY COMMISSION EXPIRES APR. 15, 1978

(1) I am Manager, Licensing Programs, in the Pressurized Water Reactor Systems Division, of 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 or rule-making proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Water Reactor Divisions.

(2) I am making this Affidavit in conformance with the provisions of 10 CFR 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 Westinghouse Nuclear Energy Systems 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.

(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.

(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 in 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 10 CFR Section 2.790, it is to be received in confidence by the Commission.

(iv) The information is not available in public sources 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 the attachment to Westinghouse letter No. NS-CE-1142, Eicheldinger to Eisenhut dated July 27, 1976 concerning reproductions of viewgraphs used in the Westinghouse presentation to the NRC during the meeting on July 27, 1976 on the subject of Westinghouse Reload Safety Evaluation Methodology.

This information enables Westinghouse to:

(a) Justify the design for the reload core

(b) Assist its customers to obtain licenses

(c) Meet contractual requirements

(d) Provide greater flexibility to customers assuring them of safe and reliable operation.

Further, this information has substantial commercial value as follows:

(a) Westinghouse sells the use of the information to its customers for purposes of meeting NRC requirements for licensing documentation.

(b) Westinghouse uses the information to perform and justify analyses which are sold to customers.

(c) Westinghouse uses the information to sell nuclear fuel and related services to its customers.

Public disclosure of this information is likely to cause substantial harm to the competitive position of Westinghouse in selling nuclear fuel and related services.

Westinghouse retains a marketing advantage by virtue of the knowledge, experience and competence it has gained through long involvement and considerable investment in all aspects of the nuclear power generation industry. In particular Westinghouse has developed a unique understanding of the factors and parameters which are variable in the process of design of nuclear fuel and which do affect the in service performance of the fuel and its suitability for the purpose for which it was provided.

In all cases that purpose is to generate energy in a safe and efficient manner while enabling the operating nuclear generating station to meet all regulatory requirements affected by the core loading of nuclear fuel. Confidence in being able to accomplish this comes from the exercise of judgement based on experience.

Thus, the essence of the competitive advantage in this field lies in an understanding of which analyses should be performed and in the methods and models used to perform these analyses. A substantial part of this competitive advantage will be lost if the competitors of Westinghouse are able to use the results of the Westinghouse 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. Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design and licensing of a similar product.

This information is a product of Westinghouse design technology. As such, it is broadly applicable to the sale and licensing of fuel in pressurized water reactors. The development of this information is the result of many years of Westinghouse effort and the expenditure of a considerable sum of money. In order for competitors of Westinghouse to duplicate this process

would require the investment of substantially the same amount of effort and expertise that Westinghouse possesses and which was acquired over a period of more than fifteen years and by the investment of millions of dollars.

Further the deponent sayeth not.

Attachment

This attachment addresses an informal NRC follow-up question on the responses to questions 19, 20, and 22 of NS-NRC-84-2974.

Each transient event discussed in WCAP-9272 has a list of key safety parameters. Each accident is separately evaluated to determine the impact of the deviation of a key safety parameter. Westinghouse does not presently use, or have available, any standard set of sensitivity parameters for each accident. An evaluation of the sensitivities of each event to each of the key safety parameters [

]^{a,c} The FSAR and WCAP sections or figures identified describe the analysis assumptions and results. The attached table lists the [ ]^{a,c} sensitivities based upon previously submitted information and their references for each transient event discussed in WCAP-9272. The range over which the safety parameters are valid (but not limited to) can be found in Section 15.0 of a typical FSAR. The typical FSAR section numbers and figure numbers which appear in the Attachment are those which correspond to NUREG 0800 (SRP Rev.3) format.

Section	Event	Key Safety Parameter	Sensitivity
5.3.1	Uncontrolled RCCA Bank Withdrawal from Subcritical		
5.3.2	Uncontrolled RCCA Bank Withdrawal at Power		
5.3.3	RCCA Misalignment (flux rate trip plants)		
* - applicable for turbine runback plants also			
5.3.4	Uncontrolled Boron Dilution		
5.3.5	Loss of Flow		
5.3.6	Startup of an Inactive Reactor Coolant Loop		
5.3.7	Loss of Load/ Turbine Trip		
5.3.8	Loss of Normal Feedwater/Loss of Offsite Power		

Section	Event	Key Safety Parameter	Sensitivity
5.3.9	Excessive Heat Removal due to Feedwater System Malfunction/Excess Load Increase	[	a,c]
5.3.10	Accidental Depressurization of the RCS		
5.3.11	Inadvertent operation of ECCS		
5.3.12	Single RCCA Withdrawal at Power		
5.3.13	Loss of Coolant Accident (LOCA)		
5.3.14	Accidental Depres of Second System/ Steamline Rupture		
5.3.15	Main Feedline Rupture		
5.3.16	Locked Rotor		
5.3.17	Rupture of an RCCA drive mechanism (Rod ejection)	]	

Notes

a,c

1. [

2.

3.

4.

5.

6.

7.

8.]

REFERENCES

1. Farley Units 1 and 2 Positive Moderator Temperature Coefficient and F-delta H Technical Specification Changes, letter from Alabama Power and Light (F. L. Clayton) to NRC (S. A. Varga) dated October 13, 1983

2. WCAP-7588 Rev 1-A "An Evaluation of The Rod Ejection Accident in Westinghouse Pressurized Water Reactors using Spatial Kinetics Methods"

3. WCAP-9226 Rev 1 "Reactor core Response to Excessive Secondary Steam Releases"

4. WCAP-10297-P-A "Dropped Rod Methodology For Negative Flux Rate Trip Plants"

5. WCAP-9230 "Report on the Consequences of a Postulated Main Feedline Rupture"

6. Doc. # 50-266 and 50-301, dated September 6, 1983 from Wisconsin Electric and Power Company (C. W. Fay) to NRC (H. R. Denton) regarding Technical Specification Request Change number 87, Safety Evaluation for OFA, Point Beach units 1 and 2.

7. WCAP-8986 "Perturbation Technique for calculating ECCS Cooling Performance"

8. WCAP-8359 "Effects of Fuel Densification Power Spikes on Clad Thermal Transients"