



ATTACHMENT 1

Westinghouse
Electric Corporation

Water Reactor
Divisions

Nuclear Technology Division

Box 355
Pittsburgh Pennsylvania 15230

November 23, 1983
CAW-83-106

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

REFERENCE: Duke Power Company letter to NRC dated ~~November~~ 1983
December

Dear Mr. Denton:

The proprietary material for which withholding is being requested in the reference letter by Duke Power Company is further identified in an affidavit 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 10CFR Section 2.790 of the Commission's regulations.

The proprietary material for which withholding is being requested is of the same technical type as that proprietary material previously submitted with application for withholding CAW-83-80.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Duke Power Company.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-83-106, and should be addressed to the undersigned.

Very truly yours,

Robert A. Wiesemann, Manager
Regulatory & Legislative Affairs

/bek

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

8312300226 831220
PDR ADOCK 05000413
A PDR

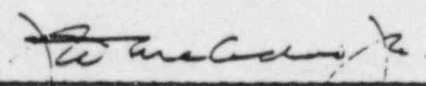
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared John D. McAdoo, 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:



John D. McAdoo, Assistant Manager
Nuclear Safety Department

Sworn to and subscribed
before me this 26th day
of September 1983.

Notary Public
COUNTY OF ALLEGHENY
17 COLLEGE STREET, PITTSBURGH, PA 15222
1986

- (1) I am Assistant Manager, Nuclear Safety Department, in the Nuclear Technology 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 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 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 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 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 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 "Technical Bases for Eliminating Large Primary Loop Pipe Ruptures as the Structural Design Bases for the South Texas Project," dated September 1983, prepared by S. A. Swamy and J. J. McInerney.

The subject information could only be duplicated by competitors if they were to invest time and effort equivalent to that invested by Westinghouse provided they have the requisite talent and experience.

Public disclosure of this information is likely to cause substantial harm to the competitive position of Westinghouse because it would simplify design and evaluation tasks without requiring a commensurate investment of time and effort.

Further the deponent sayeth not.

ATTACHMENT 2

Impact of Elimination of Postulated Circumferential and Longitudinal Pipe Breaks in the RCS Primary Loop

STRUCTURES, SYSTEMS, COMPONENTS, PROGRAMS CONSIDERED FOR IMPACT

IMPACT

Primary Loop Pipe Whip Restraints	Deleted from Design*
Reactor Cavity/Primary Shield Wall/ Crane Wall/Operating Floor	Reduction in pressurization loading
Steam Generator Sub-compartment	No change
RCS Component Supports/Heavy Component Supports	No change
Emergency Core Cooling Systems	No change
Containment Design	No change
RCS Pressure Boundary Leakage Detection Systems	No change
Environmental Qualification Program	No change

*Due to small hot gaps, the hot leg pipe whip restraints currently receive relatively small loadings from postulated main steam pipe breaks. It has been shown that the Steam Generator column supports are adequate to support the additional load in the absence of the hot leg pipe whip restraints. Also, an analysis is being performed to show that the reactor coolant loop loadings from the main steam pipe breaks will be acceptable without the hot leg pipe whip restraints.

ATTACHMENT 3

Postulated RCS Primary Loop Pipe Breaks and Associated Pipe Whip Restraints Per Unit

<u>Postulated Break Locations Per Loop</u>	<u>Associated Whip Restraint for Primary Loading</u>	<u>Erection Status Catawba Unit 2</u>
1. Reactor vessel inlet nozzle	1. Cold Leg Nozzle Break Restraint (wagon wheel)	1. Structure installed without shims
2. Reactor vessel outlet nozzle	2. Hot Leg Nozzle Break Restraint (wagon wheel)	2. Not installed
3. Steam generator inlet nozzle	3. Hot leg pipe whip restraint	3. Structure installed without shims
4. 50° elbow in the intrados (longitudinal slot)	4. Hot leg pipe whip restraint	4. Structure installed without shims
5. Steam generator outlet nozzle	5. Crossover leg pipe whip restraint (vertical run) Crossover leg elbow restraints	5. Structure installed with shims Compression blocks installed without shimming
6. Reactor coolant pump inlet nozzle (pump suction)	6. Crossover leg elbow restraints	6. Compression block installed without shims
7. Crossover leg closure weld	7. Crossover leg elbow restraints	7. Compression blocks installed without shimming
8. Reactor coolant pump outlet	8. None	

ATTACHMENT 4

Estimated Cost Savings/Operational Benefits
for Elimination of Primary Loop
Pipe Breaks on Catawba
Unit 2

<u>Category</u>	<u>Cost Savings (1983 rates)</u>	<u>Operational Benefit</u>
1. Elimination of RCS pipe whip restraints	\$0.6M - Pipe whip restraint installation cost*	-Substantial improvement in quality of ISI
	\$1.3M - Occupational radiation exposure over Unit 2 life	-Substantial improvement in personnel access results in dose reduction of 600 man-rem
	- Simplifies plant design by elimination of potential interferences with piping, hangers, impulse tubing, etc.	-Improved access for operation and maintenance
	\$0.1M - Eliminates additional hold points during initial heatup for verifying pipe-restraint clearances	-Reduced RCS heat loss to containment at whip restraint locations.
		-Reduced risk of unanticipated pipe restraint for thermal growth and seismic movement.
2. Simplification of analysis associated with dynamic effects and loading conditions.		-Improvement in overall plant safety (NUREG/CR-2136)
	- Pressurization loadings reduced on primary shield wall, crane wall, operating floor, and subcompartment analyses.	-Simplification of analyses involving loadings due to future plant modifications.
TOTAL	\$2 Million	600 man-Rem

*Of a total of 20 restraints, four have not been installed. Shimming work has not been performed on any of the restraints.