



Westinghouse
Electric Corporation

Power Generation
Group

Steam Turbine-Generator Divisions

Lester Branch Box 9175
Philadelphia Pennsylvania 19113

June 10, 1981

James R. Miller, Chief
Standardization and Special Projects Branch
Division of Licensing
Nuclear Regulatory Commission
Phillips Building
7920 Norfolk Avenue
Bethesda, MD 20014



SUBJECT: Westinghouse Topical Reports, May, 1981
Nuclear Steam Turbine Disc Cracking

Dear Mr. Miller:

Enclosed are:

1. Twenty-five (25) copies of the topical report WSTG-1-P-"Procedures for Estimating the Probability of Steam Turbine Disc Rupture From Stress Corrosion Cracking," May, 1981, (proprietary).
2. Fifteen (15) copies of the topical report WSTG-1-NP-"Procedures for Estimating the Probability of Steam Turbine Disc Rupture From Stress Corrosion Cracking," May, 1981, (non-proprietary).
3. Twenty-five (25) copies of the topical report WSTG-2-P "Missile Energy Analysis Methods for Nuclear Steam Turbines," May, 1981 (proprietary).
4. Fifteen (15) copies of the topical report WSTG-2-NP "Missile Energy Analysis Methods for Nuclear Steam Turbines," May, 1981, (non-proprietary).

Also enclosed are:

1. One (1) copy of Application for Withholding AW-81-2 (non-proprietary)
1. One (1) copy of the 1/7/80 Application for Withholding (non-proprietary).
2. One (1) copy of the 1/7/80 Affidavit (non-proprietary).

For
Reference

8106170142

14 cys PROP
10 cys NP
ADVANCED TO
BEREGREN

WSTG-1-P
T007 5/1/25
WSTG-1-NP
T008 5/1/15
WSTG-2-P
T007 5/1/25
WSTG-2-NP
T008 5/1/10

Topical report WSTG-1-P describes the present methodology used by the Westinghouse Steam Turbine-Generator Division (STGD) for estimating the probability of disc rupture and missile generation due to stress corrosion cracking. Probability values resulting from the application of WSTG-1-P on a unit specific basis are given to Utilities customers of STGD in the form of "Results of Probability Analysis of Disc Rupture and Missile Generation."

Topical report WSTG-2-P describes the present methodology used by STGD to calculate the turbine missile information on a unit-specific basis that has been given to Utilities customers of STGD in the form of "Turbine Missile Reports." This missile energy analysis has been developed through an evolutionary process at Westinghouse which began in the 1960's, and has yielded the most sophisticated information available to Westinghouse.

Westinghouse is now making the above topical information available to the NRC by reason of these reports. The NRC nor any utility customer should ever evaluate a unit solely on the basis of these topical reports-- instead, the unit-specific "Turbine Missile Report" and "Results of Probability Analysis of Disc Rupture and Missile Generation" should be the source documents for consideration.

These Topical Reports are submitted to the NRC as part of the generic Westinghouse/Utility Industry Program on Nuclear Steam Turbine Disc Cracking.

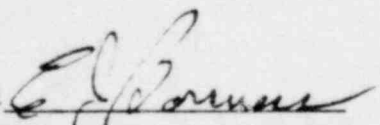
These submittals contain proprietary information of the Westinghouse Electric Corporation. In conformance with the requirements of 10 CFR Section 2.79, as amended, of the Commission's regulations we are enclosing with these submittals an application for withholding from public disclosure and an affidavit. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission.

Regards,



F. R. Vaccaro
Project Manager
Turbine Disc Programs

Approved



E. J. Barsness
Program Manager
LP Turbine Disc Program



Westinghouse
Electric Corporation

Power Generation
Group

Steam Turbine-Generator Divisions

Lester Branch Box 9175
Philadelphia Pennsylvania 19113

June 10, 1981

AW-81-12

James R. Miller, Chief
Standardization and Special Projects Branch
Division of Licensing
Nuclear Regulatory Commission
Phillips Building
7920 Norfolk Avenue
Bethesda, MD 20014

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

SUBJECT: Westinghouse Topical Reports, dated May, 1981
Nuclear Steam Turbine Disc Cracking
REF: Transmittal Letter F. R. Vaccaro to James R. Miller,
June 10, 1981

Dear Mr. Miller:

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. Withholding from public disclosure is requested with respect to the subject information which is further identified in the affidavit accompanying this application.

The undersigned has reviewed the information sought to be withheld and is authorized to apply for its withholding on behalf of Westinghouse, STG.

The affidavit accompanying this application 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.

Correspondence with respect to this application for withholding or the accompanying affidavit should be addressed to the undersigned.

Regards,

F. R. Vaccaro
Project Manager
Turbine Disc Programs

Westinghouse
Electric Corporation

Power Generation
Group

Steam Turbine Division

Lester Branch Box 9175
Philadelphia Pennsylvania 19113

January 7, 1980

Mr. J. W. Ross
Operating Reactors Branch
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. V. Noonan
Inspection and Enforcement Branch
U.S. Nuclear Regulatory Commission

APPLICATION FOR WITHHOLDING PROPRIETARY

INFORMATION FROM PUBLIC DISCLOSURE

Subject: Re-evaluation of Inspection Schedule for AA and A Categories -
Attachment C of December 20, 1979 Letter

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. Withholding from public disclosure is requested with respect to the subject information which is further identified in the affidavit accompanying this application.

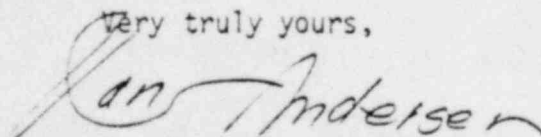
The undersigned has reviewed the information sought to be withheld and is authorized to apply for its withholding on behalf of Westinghouse, STG-TOD.

The affidavit accompanying this application 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 subject information which is proprietary to Westinghouse and which is further identified in the affidavit be withheld from public disclosure in accordance with 10 CFR Section 2.790 of the Commission's regulations.

Correspondence with respect to this application for withholding or the accompanying affidavit should be addressed to the undersigned.

Very truly yours,



Van S. Andersen, Manager
Projects Department

enclosure

cc: J. A. Cooke, Esq.
Office of the Executive Legal Director, NRC

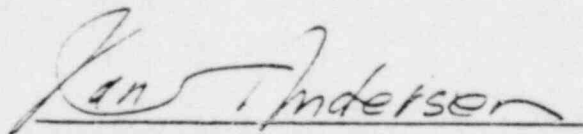
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

COUNTY OF DELAWARE:

ss

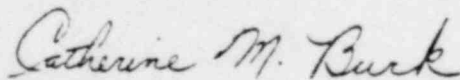
Before me, the undersigned authority, personally appeared Van S. Andersen, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Corporation ("Westinghouse") and that the averments of fact set forth in this Affidavit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



Van S. Andersen, Manager

Projects Department

Sworn to and subscribed
before me this 7th day
of January 1980.



CATHERINE M. BURK, NOTARY PUBLIC
TINICUM TOWNSHIP, DELAWARE COUNTY
MY COMMISSION EXPIRES JULY 25, 1983
Member, Pennsylvania Association of Notaries

- (1) I am Manager, Projects Department, Steam Turbine-Generator Technical Operations 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 rulemaking proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Technical Operations Division.
- (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 Technical Operations Division 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 of 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.

- (h) Public disclosure of this information would allow unfair and untruthful judgments on the performance and reliability of Westinghouse equipment components and improper comparison with similar components made by competitors.

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 Attachment C to Westinghouse letter Andersen to Ross, dated December 20, 1979, concerning re-evaluation of inspection schedule for "AA" and "A" categories. The letter and attachment were submitted in response to the NRC's request at a December 17, 1979 meeting.

The information enables Westinghouse to:

- (a) Develop test inputs and procedures to satisfactorily verify the design of Westinghouse supplied equipment.
- (b) Assist its customers to obtain licenses.

Further, the information has substantial commercial value as follows.

- (a) Westinghouse can sell the use of this information to customers.
- (b) Westinghouse uses the information to verify the design of equipment which is sold to customers.
- (c) Westinghouse can sell services based upon the experience gained and the test equipment and methods developed.

Public disclosure of this information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to design, manufacture, verify, and sell electrical equipment for commercial turbine-generators without commensurate expenses. Also, public disclosure of the information would enable others having the same or similar equipment to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the equipment described in part by the information is the result of many years of development by Westinghouse and the expenditure of a considerable sum of money.

This could only be duplicated by a competitor if he were to invest similar sums of money and provided he had the appropriate talent available and could somehow obtain the requisite experience.

Further the deponent sayeth not.