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Westinghouse Electric Corporation Water Reactor Divisions

Nuclear Technology Division

Pittsburgh Pennsylvania 15230

June 13, 1980 NS-TMA-2261

Mr. James R. Miller, Chief Special Projects Branch Division of Project Management U.S. Nuclear Regulatory Commission Phillips Building 7920 Norfolk Avenue Bethesda, Maryland 20014

Dear Mr. Miller:

#### Enclosed are:

- Forty (40) copies of WCAP-9725 (Proprietary).
- Twenty (20) copies of WCAP-9726 (Non-Proprietary). 2.

Both reports are entitled, "Westinghouse Technical Suppr.: Complex."

#### Also enclosed are:

- One (1) copy of Application for Withholding Proprietary Information from Public Disclosure, AW-80-32 (Non-Proprietary).
- One (1) copy of Affidavit, AW-80-32 (Non-Proprietary).

This report provides the functional and technical descriptions of the Westinghouse Technical Support Complex (TSC), that addresses certain requirements made by the NRC for improved in-plant procedures and preparations to cope with emergencies. The TSC design reflects the result of an intensive Westinghouse study of the plant from the perspective of the recommendations made by the NRC Lessons Learned Task Force following the TMI-2 incident.

The TSC contains a computer based data acquisition and display system which addresses the NRC requirements for a Safety Farameter Display System and Technical Support Center. In addition, the TSC contains a Bypassed and Inoperable Status Indication System which addresses the retrofit of Regulatory Guide 1.47. Each of these systems draws from a common computerized data base with individual system CRT displays, human engineered for enhanced effectiveness. The same data base would be used to provide outputs 9725 5 140 -9725 5 140 -9726 5 120 for offsite data requirements such as the Emergency Operations Facility and Nuclear Data Link.

The following aspects of the Westinghouse design are highlighted for further NRC consideration:

- 1. The systems comprising the TSC are not required for the safe shutdown of the plant. They should be considered as operational aids, and as such, Westinghouse believes the advantages associated with a flexible computer based design are more important than providing a design that is less useful, substantially more costly, or not available in the near-term which could be seismically qualified. Further, substantial cost and effort have been applied in providing qualified instrumentation on the plant control board to be utilized by the operator to bring the plant to a safe shutdown condition in the event of a seismic occurrence. The Westinghouse design is thus not seismically qualified.
- Westinghouse believes that a fault tolerant computer based architecture with high reliability as a design goal is superior to a train oriented or single failure proof system.

The design documented in this report is being incorporated in the following plants and will be referenced in the utility submittals in response to certain NRC requirements resulting from the TMI-2 event:

- Sequoyah Units I and 2
- 2. Watts Bar Units 1 and 2
- 3. Donald C. Cook Units 1 and 2
- 4. Virgil C. Summer
- 5. Trojan

This submittal contains proprietary information. In conformance with the requirement of IOCFR Section 2.790, as amended, of the Commission's regulations, we are enclosing with this submittal an application for withholding from public disclosure and an affidavit. The affidavit identifies the information sought to be withheld and sets forth the basis on which the information may be withheld from public disclosure by the Commission.

We expect that the non-proprietary version of this report, WCAP-9726, will be placed in the Public Document Room and identified as a Westinghouse topical report.



Westinghouse Electric Corporation Water Reactor Divisions Nuclear Technology Division

Box 355 Pittsburgh Pennsylvania 15230

June 13, 1980 AW-80-32

Mr. James R. Miller, Chief Special Projects Branch Division of Project Management U.S. Nuclear Regulatory Commission Phillips Building 7920 Norfolk Avenue Bethesda, Maryland 20014

## APPLICATION FOR WITHHOLDING PROPRIETARY

## INFORMATION FROM PUBLIC DISCLOSURE

SUBJECT: WCAP-9725, "Westinghouse Technical Support Complex" (Proprietary)

REF: Westinghouse Letter No. NS-TMA-2261, Anderson to Miller, dated

June 13, 1980

Cear Mr. Miller:

This application for wanholding is submitted by Westinghouse Electric Corporation ("Westinghouse") pursuant to the provisions of paragraph (b)(l) 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, WRD, notification of which was sent to the Secretary of the Commission on April 19, 1976.

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 10CFR Section 2.790 of the Commission's regulations.

/bek

Enclosure

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

## 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 Affidav' are true and correct to the best of his knowledge, information, and belief:

Robert A. Wiesemann, Manager Regulatory and Legislative Affairs

Sworn to and subscribed before me this 15 day of 1980.

Notary Public

My Commission Expires Apr. 15, 1982
Member Rennsylvania Aprociation of Notarioe

- (1) I am Manager, Regulatory and Legislative Affairs, 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 rulemaking 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 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 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 WCAP-9725, "Westinghouse Technical Support Complex," (Proprietary), being transmitted by Westinghouse letter No. NS-TMA-2261, Anderson to Miller, dated June 13, 1980. This report is being submitted pursuant to the NRC's Topical Report Program for generic review by the Regulatory Staff and is expected to be referenced in several licensee and applicant submittals in response to certain NRC requirements resulting from the TMI-2 event.

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

- (a) Apply for patent protection.
- (b) Optimize control room operator and technical support personnel man-machine interface designs and criteria.
- (c) Assist its customers to obtain NRC approval.
- (d) Justify the design basis for the Technical Support Complex functions and inputs.

Further this information has substantial commercial value as follows:

- (a) We house plans to sell the system design and equipment described in part by the information.
- (b) Westinghouse plans to sell the use of the information to its customers for purposes of meeting NRC requirements for licensing documentation.
- (c) Westinghouse can sell testing 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 (1) it would result in the loss of valuable patent rights; and (2) it would enhance the ability of competitors to design, manufacture, verify, and sell electrical equipment for commercial power reactors 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 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 engineering programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended for system design software development.

Further the deponent sayeth not.