



Westinghouse
Electric Corporation

Power Systems

Box 355
Pittsburgh Pennsylvania 15230-0355

September 21, 1988
CAW-88-102

Dr. Thomas Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: Safety Evaluation Supporting a More Negative EOL Moderator
Temperature Coefficient Technical Specification for the
Millstone Nuclear Power Station Unit 3

Dear Dr. Murley:

The proprietary information for which withholding is being requested in the enclosed letter by Northeast Nuclear Energy Company (NNECO) 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 required is of the same technical type as that proprietary material previously submitted as Affidavit AW-77-018.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by NNECO.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-88-102, and should be addressed to the undersigned.

Very truly yours,

Robert A. Wiesemann, Manager
Regulatory & Legislative Affairs

Enclosures

cc: E. C. Shomaker, Esq.
Office of the General Counsel, NRC

8810110242 881005
PDR ADOCK 05000423
PDC


AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS


COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared Robert A. Wieseemann, 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. Wieseemann, Manager
Licensing Programs

Sworn to and subscribed
before me this 30 day
of April 1977.



Notary Public

THE NATURE OF THE COMPETITION IN THE NUCLEAR BUSINESS

Westinghouse's principal competitors in the nuclear steam supply business are Babcock & Wilcox, Combustion Engineering, and General Electric. The principal U. S. competitors in the nuclear fuel fabrication business are Babcock & Wilcox, Combustion Engineering, Exxon, and General Electric. With the exception of General Electric, these competitors are new entries in the business with substantially smaller investments in technology. Westinghouse also has competition from foreign fabricators. This competition can drastically affect our ability to obtain contracts in the international market. Specific competitors include ASEA-ATOM (Sweden), Kraftwerk AEG (Germany), Framatome (France), BNFL (Great Britain), Enusa (Spain), Mitsubishi (Japan), and Fabricazione Nucleari (Italy).

Both the nuclear steam supply and the nuclear fuel fabrication businesses involve high technology, and competition is on the basis of that high technology rather than on price. Only if competition continues based on technology will Westinghouse be able to recover its substantial investments in technology and product development.

EFFECT OF RELEASE OF INFORMATION ON WESTINGHOUSE COMPETITIVE POSITION

If, as a matter of general practice, cost or price information or information about the basis on which Westinghouse makes its business judgments were made publicly available, it would have the general effect of altering the nature of competition from a technology base to a price base. This would change the entire complexion of the business and drive it toward a low investment-low technology development business. Under such circumstances, those in the business with heavy unrecovered investments in technology such as Westinghouse would have difficulty competing successfully with those who have made relatively small investments since

AW-77-18

business would tend to go to the lowest qualified bidder. The general public would also suffer in that they would be deprived of the benefits of technological developments that would most likely far exceed any short-term benefits derived from lower prices. Likewise, a general practice of making publicly available information obtained from investments in technology would enable competitors to benefit without having to make commensurate investments. This would stifle the incentive for further investments in technology and drive the business to price-based competition instead of competition on the basis of technology with the same end results as in the case of disclosure of cost or price information.

WHAT WESTINGHOUSE SEEKS TO PROTECT

Westinghouse seeks to protect its ability to recover its investments in:

- (1) Basic data resulting from research and development.
- (2) Analytical methods and models.
- (3) Details of our designs including margins, tolerances, etc.
- (4) The knowledge of what data to present and how to present the data to satisfy NRC licensing requirements. NOTE: In the current licensing environment, the capability to obtain licensing approval has become very important in the marketplace.

The above identified information is of considerable commercial advantage to the competitors of Westinghouse to the extent that it eliminates the need for similar investments in technology.

RELATIONSHIP OF INFORMATION SOUGHT TO BE WITHHELD FROM PUBLIC DISCLOSURE TO WHAT IS SOUGHT TO BE PROTECTED

INFORMATION SOUGHT TO BE WITHHELD

The information sought to be withheld consists of the details of the Westinghouse flow path model, analytical modeling techniques, testing programs, comparison of effects of modified initial gas pressure calculation, pump speed calculations, continuous flow path quality calculation, limiting pump speed factor, and discussion of results. The release of this information would result in the following competitor benefits:

POTENTIAL ADVANTAGES TO COMPETITORS

- (1) It reduces or eliminates the amount of analysis, research and development work competitors would have to do by providing specific data which by reverse engineering together with other information, whether it be their own or that which is made publicly available, enables competitors to derive the results of research and development work with a much smaller investment of their own resources.
- (2) It enables competitors to learn details of our model, calculations, and testing programs.
- (3) It allows competitors to verify their own analytical techniques by using comparative testing arguments and with a much smaller investment of resources.

- (4) It enables competitors to define and justify the scope and contents of their testing programs based on a comparison with an accepted program and thereby reduce their costs.
- (5) It would provide competitors with the opportunity to develop a similar model on a time schedule which would allow them to counter Westinghouse in the marketplace.

INVESTMENT BY WESTINGHOUSE IN WHAT IS SOUGHT TO BE PROTECTED

A considerable amount of highly qualified development effort has been expended over a five year period in formulating the analytical models and computer programs used to assess emergency core cooling system performance during a loss-of-coolant accident. The investment involved in test components, testing facilities, direct labor and computer costs amounts to approximately \$3 million dollars. Some specific examples of this effort include testing of pump performance under single and two phase flow conditions, transient testing and analytical formulations for blowdown heat transfer, single and multi-rod dynamic evaluations, and associated code development and calculations of system effects as they influence emergency core cooling system performance during loss-of-coolant accidents.

It should also be recognized that, in the course of these efforts, Westinghouse has generated additional information regarding emergency core cooling system design bases to improve our product and ultimately enhance our competitive position. Furthermore, it is felt that the extensive effort expended in obtaining comprehensive analytical and experimental information on system and component emergency core cooling system performance could directly affect our sales performance with respect to the licensing service for which it is provided.

POTENTIAL HARM TO WESTINGHOUSE

We believe there is a likelihood of substantial harm to the competitive position of Westinghouse if the information sought to be withheld is publicly disclosed, which could result in a minimum loss of approximately \$10,000,000 to \$12,000,000 annually in potential reload fuel sales and reload emergency core cooling system analyses.

An example of Westinghouse information publicly disclosed and serving to the advantage of our competitors is an instance where information submitted to the NRC by Westinghouse was used by the NRC practically verbatim in the issuance of the regulatory guide concerning the rod ejection accident. There was no attempt by Westinghouse to protect this information from disclosure in this instance, but it serves to illustrate the value which can accrue to competitors from the release of the more sensitive information which Westinghouse does seek to protect.

A further example--a licensee, a customer of a Westinghouse competitor, concluded that power spikes due to fuel densification in both the LOCA and DNB analyses need not be considered. In both cases, justification was based upon Westinghouse topical reports. The NRC Staff concluded this was acceptable. This situation was further aggravated by the fact that the licensee had not considered the effects of rod bowing on DNB and LOCA analyses. However, based upon experimental data in another Westinghouse topical report which had been reviewed and accepted by the Staff, the licensee was able to eliminate penalties.

Further the deponent sayeth not.