



Rensselaer

Department of Nuclear Engineering & Engineering Physics

March 25, 1991

50-225

Mr. Theodore S. Michaels
Decommissioning and Environmental Project Directorate
Non-Power Reactor
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Transmittal of Information Regarding the Calculation and
Measurement of Technical Specification Parameters for Erbium
Burnable Absorbers at the Rensselaer Polytechnic Institute Reactor
Critical Facility.

Dear Mr. Michaels:

This letter transmits, as Enclosure (I), four (4) copies of the slides presented at the February 7, 1991, meeting with the NRC regarding the calculation of Technical Specification parameters for proposed critical experiments at the Rensselaer Polytechnic Institute Reactor Critical Facility. These experiments, scheduled to start May 1, 1991, are being conducted to provide additional verification of Combustion Engineering (C-E) methods used to calculate physics parameters for core designs containing erbium burnable absorbers.

This letter also transmits, as Enclosure (II), four (4) copies of a report that provides a more detailed description and presentation of the experiment and the preliminary calculations performed of Technical Specification parameters. The calculated value of each parameter is compared with the Technical Specification limit. In all cases, the calculated values were bounded by the Technical Specification limit. These calculations form the technical basis for the negative 10CFR50.59 finding documented in the safety evaluation included in the report for your information.

It should be noted that the information contained in Enclosures (I) and (II) are preliminary and have not been verified. In addition, the information contained in these enclosures are considered by C-E to be proprietary. As such, it is requested that this information be withheld from public disclosure in accordance with the provisions of 10CFR2.790 and that this information be appropriately safeguarded. The reasons for the classification of this information as proprietary are delineated in the affidavit provided as Enclosure (III).

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If there are any questions on the enclosed information, or if we can be of other assistance to you or your staff on this subject, please do not hesitate to call me at (518)276-4010.

Very truly yours,

A handwritten signature in dark ink, appearing to read "D.R. Harris". The signature is fluid and cursive, with the first name "D.R." and the last name "Harris" clearly distinguishable.

Dr. D.R. Harris, Director
Reactor Critical Facility (RCF)
Rensselaer Polytechnic Institute

Enclosures: as Stated

(Enclosure I - Copies 00001 to 00004)

(Enclosure II - Copies 00001 to 00004)

cc: J.M. Betancourt (C-E)
A Jonsson (C-E)
S.L. Wu (NRC)

AFFIDAVIT PURSUANT

TO 10 CFR 2.790

Combustion Engineering, Inc.)
State of Connecticut)
County of Hartford) SS.:

I, S. A. Toelle, depose and say that I am the Manager, Operating Reactor Licensing, of Combustion Engineering, Inc., duly authorized to make this affidavit, and have reviewed or caused to have reviewed the information which is identified as proprietary and referenced in the paragraph immediately below. I am submitting this affidavit in conformance with the provisions of 10 CFR 2.790 of the Commission's regulations and in conjunction with Rensselaer Polytechnic Institute for withholding this information.

The information for which proprietary treatment is sought is contained in the following documents:

"Calculation of Tech Spec Parameters for the RCF at RPI with Mixed SPERT F1 and ABB/CE 16x16 Fuel", February 7, 1991.

"ABB CENP Critical Experiments in the Reactor Critical Facility of RPI 10CFR50.59 Evaluation", March 1991.

These documents have been appropriately designated as proprietary.

I have personal knowledge of the criteria and procedures utilized by Combustion Engineering in designating information as a trade secret, privileged or as confidential commercial or financial information.

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, included in the above referenced document, should be withheld.

1. The information sought to be withheld from public disclosure is the calculation of and requirements for technical specification physics parameters for fuel containing erbium burnable absorbers, which is owned and has been held in confidence by Combustion Engineering.
2. The information consists of test data or other similar data concerning a process, method or component, the application of which results in substantial competitive advantage to Combustion Engineering.
3. The information is of a type customarily held in confidence by Combustion Engineering and not customarily disclosed to the public. Combustion Engineering 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 details of the aforementioned system were provided to the Nuclear Regulatory Commission via letter DP-537 from F. M. Stern to Frank Schroeder dated December 2, 1974. This system was applied in determining that the subject document herein is proprietary.
4. The information is being transmitted to the Commission in

confidence under the provisions of 10 CFR 2.790 with the understanding that it is to be received in confidence by the Commission.

5. The information, to the best of my knowledge and belief, is not available in public sources, and any disclosure to third parties has been made pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence.
6. Public disclosure of the information is likely to cause substantial harm to the competitive position of Combustion Engineering because:
 - a. A similar product is manufactured and sold by major pressurized water reactor competitors of Combustion Engineering.
 - b. Development of this information by C-E required thousands of manhours and hundreds of thousands of dollars. To the best of my knowledge and belief, a competitor would have to undergo similar expense in generating equivalent information.
 - c. In order to acquire such information, a competitor would also require considerable time and inconvenience to calculate and develop the requirements for technical specification physics parameters for fuel containing erbium burnable absorbers.
 - d. The information required significant effort and expense to obtain the licensing approvals necessary for application of

the information. Avoidance of this expense would decrease a competitor's cost in applying the information and marketing the product to which the information is applicable.

- e. The information consists of the calculation of and requirements for technical specification physics parameters for fuel containing erbium burnable absorbers, the application of which provides a competitive economic advantage. The availability of such information to competitors would enable them to modify their product to better compete with Combustion Engineering, take marketing or other actions to improve their product's position or impair the position of Combustion Engineering's product, and avoid developing similar data and analyses in support of their processes, methods or apparatus.
- f. In pricing Combustion Engineering's products and services, significant research, development, engineering, analytical, manufacturing, licensing, quality assurance and other costs and expenses must be included. The ability of Combustion Engineering's competitors to utilize such without information similar expenditure of resources may enable them to sell at prices reflecting significantly lower costs.
- g. Use of the information by competitors in the international marketplace would increase their ability to market nuclear steam supply systems by reducing the costs associated with

their technology development. In addition, disclosure would have an adverse economic impact on Combustion Engineering's potential for obtaining or maintaining foreign licensees.

Further the deponent sayeth not.

S. A. Toelle

S. A. Toelle
Manager
Operating Reactor Licensing

Sworn to before me
this 7th day of March, 1991

Laurie J. White
Notary Public

My commission expires: 3/31/94