

August 30, 1985
 LD-85-043

George Knighton, Chief
 Licensing Branch No. 3
 U.S. Nuclear Regulatory Commission
 Washington, D.C. 20555

Subject: Reference Functional Design Requirements for the Control Element Assembly Calculators (CEAC) and Core Protection Calculators (CPC)

- References:
- (1) CEN-302(S)-P, "CPC Improvement Program Detailed Presentation to the NRC," April, 1985.
 - (2) CEN-147(S)-P, "Functional Design Specification for a Core Protection Calculator," January, 1981.
 - (3) CEN-148(S)-P, "Functional Design Specification for a Control Element Assembly Calculator," January, 1981.

Dear Mr. Knighton:

The CPC Oversight Committee, consisting of Arizona Nuclear Power Project, Arkansas Power & Light Company, Louisiana Power & Light Company and Southern California Edison, with Combustion Engineering as its technical consultant, met with the NRC staff on November 8, 1984, March 8, 1985, and April 18, 1985 to discuss a program of CPC Modifications and Methodology Improvements scheduled for implementation in 1986 and 1987 [Reference (1)]. The NRC indicated their desire for updated generic functional design specification documents for the current, approved CPC and CEAC systems which could serve as a reference point for NRC review of the changes instituted by the proposed program.

The purpose of this letter is to provide the NRC with the requested generic CPC and CEAC design specifications [Attachments (A) thru (D)].

Combustion Engineering is providing these documents on behalf of the CPC Oversight Committee. As the NRC staff (Core Performance Branch) requested, these documents are being provided for informational purposes only and no NRC review is being requested.

All of the information contained in Attachments (A) through (D) has been previously reviewed and approved by the NRC. The information was collected from References (2) and (3) and software modification documents that had been submitted separately on individual utility dockets. The attached documents are not applicable to any individual licensee until referenced by that licensee for use on his docket.

PROP ENCL TO: CORE PERFORMANCE SC45

H. FORD	104
J. WILSON	104
BOB LEE	104
E. LITRA	104

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Mr. George Knighton
August 30, 1985

LD-85-043
Page 2

It is requested that any questions you have about the attached documents be addressed to the Chairman of the CPC Oversight Committee, with copies sent to each committee member and C-E. Enclosed is a list of individuals to whom the copies should be sent.

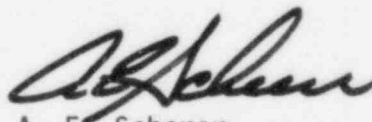
Attachments (A) and (C) contain information considered by C-E to be proprietary in nature. As such, we request that they be withheld from public disclosure in accordance with the provisions of 10 CFR 2.790 and that this material be safeguarded. The reasons for the classification of this material as proprietary are delineated in the affidavit provided in Attachment (E).

Since these documents are being provided for informational purposes only and no review or approval is being requested, Combustion Engineering believes that no fees are to be incurred as a result of this submittal.

Should you have any questions on the contents of this letter, please feel free to contact me or Mr. H. C. Irwin of my staff at (203) 285-5210.

Very truly yours,

COMBUSTION ENGINEERING, INC.



A. E. Scherer
Director
Nuclear Licensing

AES:bks

cc: G. Hsii
L. Phillips
L. Rubenstein

Enclosure

- Attachments:
- (A) CEN-304-P, "Functional Design Requirement for a Control Element Assembly Calculator," July 1985: Copies 000001 thru 000009.
 - (B) CEN-304-NP: Non-proprietary Version of Attachment 1: 9 Copies Attached.
 - (C) CEN-305-P, "Functional Design Requirement for a Core Protection Calculator," July 1985: Copies 000001 thru 000009.
 - (D) CEN-305-NP: Non-proprietary Version of Attachment 3: 9 Copies Attached.
 - (E) Affidavit Attesting to the Proprietary Nature of CEN-304-P and CEN-305-P.

Correspondence List

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AFFIDAVIT PURSUANT

TO 10 CFR 2.790

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

I, A. E. Scherer, depose and say that I am the Director, Nuclear 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 for withholding this information.

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

CEN-308-P, CPC/CEAC Software Modifications for the CPC Improvement Program, August 1985.

This document has 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 are the CPC/CEAC software modifications for the CPC Improvement Program, including detailed descriptions of the algorithms in symbolic algebra, addressable constants, and data base constants, 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 a 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 are 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 tens of 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 related to the development of similar modifications to algorithms, addressable constants, and data base constants.

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.

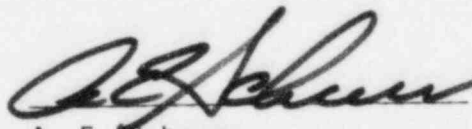
e. The information consists of the CPC/CEAC software modifications for the CPC Improvement Program, including detailed descriptions of the algorithms in symbolic algebra, addressable constants, and data base constants, the application of which provides a competitive economic advantage. The availability 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 information

without 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.

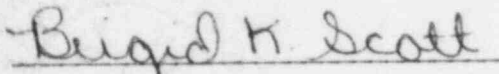
Further the deponent sayeth not.



A. E. Scherer
Director
Nuclear Licensing

Sworn to before me

this 30th day of August 1985.



Notary Public

BRIGID K. SCOTT, NOTARY PUBLIC
State of Connecticut No. 73487
Commission Expires March 31, 1990