C-E Power Systems Combustion Engineering, Inc. 1000 Prospect Hill Road Windsor, Connecticut 06095 Tel. 203/688-1911 Telex: 99297



Docket No.: STN 50-470F

April 26, 1983 LD-83-035

Mr. Darrell G. Eisenhut, Director Division of Licensing U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Subject: Fuel Design Evaluation Summary for CESSAR-F

Reference: Letter LD-83-017, A. E. Scherer to D. G. Eisenhut, dated February 28, 1983

Dear Mr. Eisenhut:

The reference letter transmitted proposed modifications to Section 4.2 of CESSAR-F to reflect the performance of some additional fuel design analyses. Combustion Engineering (C-E) has performed the stress, strain, and strain fatigue analyses for the System 80[™] fuel assembly, fuel rod, burnable poison rod and CEA, except for the seismic and LOCA analysis. In addition, the assembly lift-off and the CEA axial growth analyses were performed, and show acceptable results.

In response to questions from the NRC staff reviewer, the attached summary was prepared to augment the documentation on the CESSAR-F docket. "CESSAR Fuel and CEA Design Evaluation Summary Report" presents analytical results of the analysis cited above. Twenty-five (25) copies of the proprietary version and fifteen (15) copies of the non-proprietary version are enclosed.

Due to the proprietary nature of the material enclosed, we request that it 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 proprietary classification of this report are delineated in the enclosed affidavit.

If I can be of any further assistance in this matter, please contact me or Mr. G. A. Davis of my staff at (203) 688-1911, extension 2903.

Very truly yours,

COMBUSTION ENGINEERING, INC.

A. E. Scherer Director Nuclear Licensing

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Enclosures: 1-P to LD-83-035, "CESSAR Fuel and CEA Design Evaluation Summary Report", Copies 00001-00025)

1-NP to LD-83-035, "CESSAR Fuel and CEA Design Evaluation Summary Report", 15 Copies

Affidavit attesting to the proprietary nature of the report

AFFIDAVIT PURSUANT

TO 10 CFR 2.790

SS.:

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

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:

Enclosure 1-P to LD-83-035, CESSAR Fuel and CEA Design Evaluation Simmary Report, April 1983.

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 analytical results of the System 80[™] fuel and CEA design calculations, 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 harein 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 narm 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 of effort and hundreds of thousands of dollars. To the best of my knowledgeand 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 performance of fuel system design calculations for the System 80[™] fuel and CEA design.

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 analytical results of the System 80^m fuel and CEA design calculations, 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.

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Director Nuclear Licensing

Sworn to before me this 20th day of April, 1983

Musan M. Thompson

My Commission Expires Mar. 31, 1988