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POWER SYSTEMS

Docket No.: STN-50-470F

October 8, 1982
LD-82-079

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

Subject: CESSAR SER Confirmatory Item 7, Statistical Combination of Uncertainties

Reference: Letter LD-82-054, A. E. Scherer to D. G. Eisenhut, dated May 14, 1982

Dear Mr. Eisenhut:

Transmitted herewith are twenty five (25) proprietary and fifteen (15) non-proprietary copies of "Statistical Combination of Uncertainties Part II, Uncertainty Analysis of Limiting Safety System Settings for C-E System 80 Nuclear Steam Supply Systems" and twenty five (25) proprietary and fifteen (15) non-proprietary copies of "Statistical Combination of Uncertainties Part III, Uncertainty Analysis of Limiting Conditions for Operation for C-E System 80 Nuclear Steam Supply Systems".

A complete description of Combustion Engineering's (C-E's) statistical combination methodology is contained in the three (3) reports now submitted; Part I, previously submitted via the reference letter, presents the statistical combination of system parameter uncertainties in thermal margin analyses. Part II, enclosed, describes the statistical combination of state parameters and modeling uncertainties for the determination of the Limiting Safety System Settings (LSSS) overall uncertainty factors. Part III, enclosed, describes the statistical combination of state parameters and modeling uncertainties for the determination of the Limiting Conditions for Operation (LCO) overall uncertainty factors.

The enclosed reports do not yet include numerical values for the overall uncertainties on the Linear Heat Rate (LHR) and Departure from Nucleate Boiling Ratio (DNBR) for the LSSS of System 80. These values will be provided to you in the first quarter of 1983. However, the Staff may proceed with its review of the enclosed reports in the interim, since the methodology is clearly explained and is virtually identical to that reviewed by the Staff on four previous dockets involving C-E nuclear steam supply systems.

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Due to the proprietary nature of the material contained in the enclosures, 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 additional assistance in this matter, please contact me or Mr. G. A. Davis of my staff at (203)688-1911, Extension 2803.

Very truly yours,

COMBUSTION ENGINEERING, INC.

A. E. Scherer
Director
Nuclear Licensing

AES:ctk

Enclosures: Enclosure 1-P to LD-82-079, "Statistical Combination of Uncertainties Part II, Uncertainty Analysis of Limiting Safety System Settings C-E System 80 Nuclear Steam Supply System", Proprietary Version (Copies 000001-000025)

Enclosure 1-NP to LD-82-079, "Statistical Combination of Uncertainties Part II, Uncertainty Analysis of Limiting Safety System Settings C-E System 80 Nuclear Steam Supply System", Non-Proprietary Version (15 Copies)

Enclosure 2-P to LD-82-079, "Statistical Combination of Uncertainties Part III, Uncertainty Analysis of Limiting Conditions for Operation C-E System 80 Nuclear Steam Supply System", Proprietary Version (Copies 000001-000025)

Enclosure 2-NP to LD-82-079, "Statistical Combination of Uncertainties Part III, Uncertainty Analysis of Limiting Conditions for Operation C-E System 80 Nuclear Steam Supply System", Non-Proprietary Version (15 Copies)

Affidavit attesting to the proprietary nature of these reports.

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 documents:

Enclosure 1P to LD-82-079, "Statistical Combination of Uncertainties Part II, Uncertainty Analysis for C-E System 80 Nuclear Steam Supply Systems".

Enclosure 2P to LD-82-079, "Statistical Combination of Uncertainties Part III, Uncertainty Analysis of Limiting Conditions for Operation for C-E System 80 Nuclear Steam supply systems".

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 application of statistical methods in combining measurement uncertainties associated with Limiting Safety System Settings and Limiting Conditions for Operation of Combustion Engineering's Nuclear Steam Supply Systems, 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 reactors competitors of Combustion Engineering.

b. Development of this information by C-E required thousands of manhours and tens 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 applying the method of statistical combination to the overall uncertainty analysis for operation of a nuclear steam supply system.

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 unique use of statistical methods in the overall uncertainty analysis for operation of nuclear reactors, 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 6th day of October, 1982

Carey J. Wenzel
Notary Public

CAREY J. WENZEL, NOTARY PUBLIC
State of Connecticut No. 59962
Commission Expires March 31, 1985