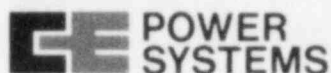


C-E Power Systems
Combustion Engineering, Inc.
1000 Prospect Hill Road
Windsor, Connecticut 06095

Tel. 203/688-1911
Telex 99297



Docket No. STN-50-470F

May 10, 1983
LD-83- 044

Mr. Cecil Thomas, Branch Chief
Standardization and Special Projects Branch
Office of Nuclear Regulatory Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: CESSAR-F Amendment Number 8

Dear Mr. Thomas:

Combustion Engineering, Inc., hereby submits for your review seventy (70) copies of Amendment No. 8 (non-proprietary) to CESSAR-F. A draft copy of this amendment has been supplied to the Staff for advance review.

The attached list provides a description of and explanation for the changes to each amended Section of CESSAR-F. A significant portion of the changes result from our responses to Open and Confirmatory items and have previously been submitted to the Staff. These items are identified by reference in the attached list.

If we can be of any further assistance, please contact either myself or Mr. G. A. Davis of my staff at (203) 688-1911, extension 2803.

Very truly yours,
COMBUSTION ENGINEERING, INC.

A handwritten signature in dark ink, appearing to read 'A. E. Scherer', written over the printed name.

A. E. Scherer
Director
Nuclear Licensing

AES:las
Attachment
cc: G. Meyer
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AMENDMENT NUMBER 8 TOPICS OF REVISION

1) CESSAR-F Scope and Interfaces (Chapter 1)

Revised to correct a typographical error identified during the Staff's review of the tabulation of reactor fuel design characteristics.

2) Classification of Components and Component Testing (Chapter 3)

Reference (2-1): Letter LD-83-018, A. E. Scherer to D. G. Eisenhut, dated February 28, 1983

Revised commitment to provide load limiting device test results on CESSAR-F docket to indicate that these results will be available on a plant-specific basis. This change was previously identified to the Staff in Reference (2-1).

Also, revised to remove pressurizer safety valve and flange from the potential missile list.

3) Design Bases for Fuel Systems Design (Chapter 4)

Reference: (3-1) Letter LD-83-017, A. E. Scherer to D. G. Eisenhut, dated February 28, 1983

(3-2) Letter LD-83-035, A. E. Scherer to D. G. Eisenhut, dated April 26, 1983

(3-3) Letter LD-81-069, A. E. Scherer to D. G. Eisenhut, dated October 8, 1981

Revised Section 4.2 to incorporate the conclusions of the System 80™ fuel stress, strain, strain fatigue, assembly lift-off and CEA axial growth analyses. References (3-1) and (3-2) previously transmitted to the Staff the results of these analyses and provided a draft of the revised sections of CESSAR-F.

Changes were also made to Section 4.2 to update and clarify the section to be consistent with an earlier response (Reference 3-3) to a NRC Question.

4) Reactor Coolant System and Connected Systems (Chapter 5)

Reference: (4-1) Letter LD-82-029, A. E. Scherer to D. G. Eisenhut,
dated March 4, 1982

Revised to incorporate an Interface Requirement (IR) on Emergency Feedwater System reliability. This change is consistent with C-E's discussion of the System 80™ rapid depressurization and decay heat removal capability previously submitted for Staff review via Reference (4-1).

Revised to add clarification to certain IR's and provide information on NSSS heat loads previously identified as "later".

5) Engineered Safety Features (Chapter 6)

Deleted materials from the list of principle Engineering Safety Features pressure retaining materials which were in fact not used in the System 80™ NSSS.

Deleted the IR on Safety Injection System component loading times. This IR was redundant to the IR for Safety Injection flow delivery and therefore unnecessary.

6) Iodine Removal System Licensing Report (Appendix 6B)

Reference: (6-1) Letter LD-83-034, A. E. Scherer to D. G. Eisenhut,
dated April 22, 1983

Revised the IR on post-LOCA containment sump pH and access to Iodine Removal System as indicated in Reference (6-1). The changes are intended to close out Staff review of Confirmatory Item 12 of the CESSAR-F SER.

7) Instrumentation and Controls (Chapter 7)

Reference: (7-1) Letter LD-81-069, A. E. Scherer to D. G. Eisenhut,
dated October 8, 1981.

Revised instrument characteristics to reflect design changes made for compliance with Regulatory Guide 1.97 and NUREG 0588.

Revised shutdown cooling suction line isolation valve setpoints to be consistent with LTOP results previously provided in response to NRC question 440.1 (Reference 7-1).

8) Electric Power (Chapter 8)

Deleted the reference to Safety Injection System IR that was removed in Item 5 above.

9) Auxiliary Systems (Chapter 9)

Revised to include an item in CVCS FEMA which was inadvertently omitted in the previous amendment.

10) Initial Test Program (Chapter 14)

Revised waterhammer test to incorporate the conclusions of the San Onofre Unit 2 feedring collapse investigation. Test revised to prevent damaging waterhammer and establish criteria for evaluation of test results.

11) Accident Analysis (Chapter 15)

Reference: (11-1) Letter LD-83-019, A. E. Scherer to D. G. Eisenhut, dated March 10, 1983

Revised Section 15.3.3.1, "Single Reactor Coolant Pump Rotor Seizure with Loss of Offsite Power", to include a stuck-open Atmospheric Dump Valve as required by the Staff. The results of this analysis were previously submitted to the Staff via Reference (11-1) in response to Confirmatory Item Number 16.

12) Methods for Analysis of the Loss of Feedwater Inventory Events (Appendix 15B)

Reference: (12-1) Letter LD-83-036, A. E. Scherer to D. G. Eisenhut, dated April 26, 1983

Revised Appendix 15B to include additional information on the small feedwater line break analysis in response to Confirmatory Item Number 15. The revised appendix was previously submitted to the Staff via reference (12-1).

13) Address of Additional Licensing Matters Issued Since the Regulatory Guide Cut-Off Date of CESSAR PSAR (Appendix A)

Revised statement on Regulatory Guide 1.97, updating position.

14) Address of TMI Action Plan (Appendix B)

Revise to upgrade instrument ranges to reflect revised design information.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of:

Combustion Engineering, Inc.

Standard Plant

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DOCKET NO. STN 50-470F

APPLICATION FOR REVIEW OF
"COMBUSTION ENGINEERING STANDARD
SAFETY ANALYSIS REPORT,"
AMENDMENT NO. 8

J. M. West, being duly sworn, states that he is Vice President, Nuclear Power Systems, Combustion Engineering, Inc.; that he is authorized on the part of said corporation to sign and file with the Nuclear Regulatory Commission this Amendment; and that all statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.

COMBUSTION ENGINEERING, INC.

By

J. M. West
J. M. West
Vice President
Nuclear Power Systems

Theresa M. Regan

This 10th day of May 19 83

TERESA M. REGAN, NOTARY PUBLIC

State of Connecticut No. 66097

Commission Expires March 31, 1988