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Docket No.: STN-50-470F

April 16, 1982
LD-82-045

Mr. James R. Miller, Chief
Standardization and Special Projects Branch
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: CESSAR-F Amendment No. 7

Dear Mr. Miller:

Combustion Engineering, Inc. (C-E) hereby submits for your review seventy (70) copies of Amendment No. 7 (non-proprietary) to CESSAR-F. This amendment includes a variety of changes which are listed and explained in the attached table.

If we can be of any additional assistance, please feel free to 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 cursive script, appearing to read 'G. A. Davis for'.

A. E. Scherer
Director
Nuclear Licensing

AES:ctk

Attachment

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AMENDMENT NO. 7 TOPICS OF REVISION

1) Environmental Design of Mechanical and Electrical Equipment (Chapter 3)

Section 3.11 was revised to include the ramifications of Revision 3 to topical report CENPD-255 which incorporated EG&G comments on that topical. These changes were previously transmitted in reference A.

2) Clarification of Structures, Systems and Components (Chapter 3)

At the request of the Environmental Qualification Branch, Table 3.2-1 which discusses safety class, quality class and seismic category for plant components, was revised in the following areas: containment isolation valve QA requirements, quality class for reactor coolant pump auxiliary components, QA requirements for safety related Instrumentation and Controls and all Quality Class 2 components. This table was revised to include all safety class 1, 2 and 3 valves in the reactor coolant system.

3) Missile Protection (Chapter 9)

Table 3.5-1 was revised to include a Control Rod Drive Assembly Impact dimension which is more consistent with the actual design.

4) NSSS Seismic I Active Valves (Chapter 3)

Section 3.9.3 was revised, per NRC request in SER confirmatory item 2, to provide a more definitive pump and valve operability assurance program to clarify the qualification methodology and to provide the acceptance criteria used in the program.

5) CEDM Cooling and Miscellaneous Changes (Chapter 4)

The minimum cooling requirements for the Control Element Drive Mechanisms were revised to reflect test results. Numerous clarifications and revisions were made to Chapter 4 concerning LOCA impact loads and stresses, fuel assembly design, UO_2 specific heat, fuel rod internal pressure, cladding stress strain limits and CEA differentiation to close out SER open item 2 and confirmatory items 3 and 4. These changes were previously transmitted in References B, C and D.

6) Low Temperature Overpressure Protection (Chapter 5)

Changes were made to the discussions of the Shutdown Cooling System (SCS) and Low Temperature Overpressure Protection (LTOP) concerning LTOP related alarms and SCS valve setpoints to close out Palo Verde SER confirmatory item 10. These changes were previously transmitted in Reference E.

7) Reactor Vessel Cavity Flooding (Chapter 5)

The reactor vessel cavity flooding interface was revised to maintain consistency with engineering design requirements.

8) Containment Isolation Valve Power and HPSI Flow Meters (Chapter 6)

Chapter 6 was revised to reflect NRC requirements for emergency power for containment isolation valves and to provide individual HPSI pump ultrasonic flow meters to provide alarming on low flow. SER confirmatory item 11 was closed out by these changes which were previously transmitted in Reference E.

9) Boron Dilution Alarm System (Chapter 7)

Section 7.7.1 was updated to include a description of the Boron Dilution Alarm System (BDAS) for technical specification modes 3 through 6 for protection against boron dilution in these modes. SER confirmatory item 13 was closed out by these changes which were previously transmitted in Reference E.

10) Chemical and Volume Control System Valve Power Requirements (Chapter 9)

Chapter 9 was revised to reflect emergency power supply to CVC valves to permit the plant to be brought to cold shutdown from the control room. SER confirmatory item 8 was closed out by these changes which were previously transmitted in Reference E.

11) Steam Generator Water Hammer Tests (Chapter 14)

Changes were made to two startup tests in Chapter 14 to include checks for waterhammer to address NUREG/CR-1606. Waterhammer is discussed in Appendix C.5 of the SER.

12) Chapter 15 Re-write Completion (Chapter 15)

The revision of Chapter 15 to be consistent with the Standard Review Plan was completed. The entire Chapter 15, including appendices, was revised in this amendment to close out SER confirmatory items 14,15,17 and 18. In addition, the fuel handling accident was changed to comply with Reg. Guide 1.25 to close out SER confirmatory item 19. These changes were previously transmitted in References F and G.

References:

- A. Letter A. E. Scherer to D. G. Eisenhut, LD-82-008, dated 1/29/82
- B. Letter A. E. Scherer to D. G. Eisenhut, LD-82-018, dated 2/18/82
- C. Letter A. E. Scherer to D. G. Eisenhut, LD-82-030, dated 3/11/82
- D. Letter A. E. Scherer to D. G. Eisenhut, LD-82-003, dated 1/11/82
- E. Letter A. E. Scherer to D. G. Eisenhut, LD-82-014, dated 2/11/82
- F. Letter A. E. Scherer to D. G. Eisenhut, LD-82-016, dated 2/12/82
- G. Letter A. E. Scherer to D. G. Eisenhut, LD-82-040, dated 3/31/82

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. 7

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

Subscribed and sworn to before me

This 13th day of April 19 82

Dawn E. Sander

DAWN E. SANDER, NOTARY PUBLIC
State of Connecticut No. 61526
Commission Expires March 31, 1986