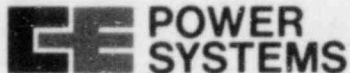


C-E Power Systems  
Combustion Engineering, Inc.  
1000 Prospect Hill Road  
Windsor, Connecticut 06095

Tel. 203/688-1911  
Telex: 99297



STN 50-470F

August 2, 1985  
LD-85-035

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Application for Amendment of the CESSAR Final Design Approval

- References:
- (1) NRC letter, Darrell G. Eisenhut to A. E. Scherer  
Docket No. STN 50-470, December 21, 1983
  - (2) C-E Letter LD-85-007, A. E. Scherer to Hugh L. Thompson, "Review of Information on the CESSAR Docket", February 22, 1985
  - (3) NRC letter, Dennis M. Crutchfield to A. E. Scherer, Docket No. STN 50-470, March 26, 1985

- Enclosures:
- (A) Issues Proposed for Inclusion in the Amendment to the CESSAR Final Design Approval No. FDA-2
  - (B) List of Correspondence on the CESSAR-F Docket, Subsequent to Supplement 2 of NUREG-0852, Which is Related to the Amendment of the CESSAR FDA

Dear Mr. Denton:

In Reference (1), the NRC issued Final Design Approval (FDA) No. FDA-2 for Combustion Engineering's (C-E's) System 80™ NSSS described in CESSAR-F, including Amendments 1 through 8. The results of the NRC review of CESSAR-F are presented in the Safety Evaluation Report (SER), NUREG-0852, dated September 1981, SER Supplement 1, dated March 1983, and SER Supplement 2, dated September 1983. SER Supplement 2 included information submitted by C-E on the CESSAR docket through June 29, 1983.

Paragraph 6 of the FDA identified exclusions from and qualifications on the scope of the System 80 design covered by the FDA. As indicated in item 6(a) of the FDA, two System 80 design features had not been reviewed and, therefore, were not included in the scope of

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August 2, 1985

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Page 2

the FDA. Item 6(b) of the FDA indicated the need for additional information to close the four confirmatory issues identified in the SER Supplement 2. Finally, item 6(c) required C-E to conduct a review of design deficiencies identified during hot functional testing of Palo Verde Nuclear Generating Station Unit 1 (PVNGS-1) for potential generic impact on the System 80 design. Subsequent to the issuance of the FDA, C-E continued to supply information to the NRC to close the above items and to provide other information related to the licensing of PVNGS-1. Resulting revisions to CESSAR-F were printed in Amendment 9 and other CESSAR-F revisions were earmarked for a forthcoming Amendment 10. In Reference (2), C-E summarized the information submitted and indicated the intent to request an amendment to the FDA.

The NRC responded to our letter with Reference (3), indicating which items had been closed. Also indicated was the NRC's intent to issue Supplement 3 to the Safety Evaluation Report when review of remaining open items, and other items requested by C-E for the FDA amendment, is completed. C-E has continued to supply information to NRC to close open items and believes that the issuance of Supplement 3 to the SER and the amendment of the CESSAR FDA would now be appropriate.

Enclosure (A) to this letter lists the issues which C-E believes should be addressed and closed out in the FDA amendment. The corresponding revisions to CESSAR will be provided in Amendment 10. The technical specifications, as agreed to by C-E and NRC staff, will be added to CESSAR via Amendment 11. C-E expects to print Amendment 10 within thirty (30) days and Amendment 11 within sixty (60) days.

Enclosure (B) lists applicable correspondence submitted on the CESSAR docket after the June 29, 1983 cutoff date for Supplement 2 to the SER.

In summary, C-E requests an amendment to the CESSAR FDA to close the items listed in Enclosure (A) and the correspondence listed in Enclosure (B). Consistent with 10 CFR 50.30 (b), this application is executed in three originals signed under affirmation. Also, a check is enclosed for the application fee of \$150.00, consistent with 10 CFR 170.21.

Mr. Harold R. Denton  
August 2, 1985

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If you have any questions, please feel free to contact me or Mr. G. A. Davis  
of my staff at (203) 285-5207.

Very truly yours,

COMBUSTION ENGINEERING, INC.

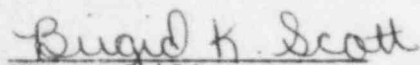


A. L. Scherer  
Director  
Nuclear Licensing

AES:las  
Enclosures  
cc: D. M. Crutchfield (NRC)  
P. Moriette (NRC)  
C. O. Thomas (NRC)  
H. L. Thompson (NRC)

Sworn to before me

this 2nd day of August 1985.

  
Notary Public

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

Issues Proposed for Inclusion in the Amendment  
to the CESSAR Final Design Approval No. FDA-2

<u>Issue</u>	<u>Reference for Status</u>
1. Shutdown Cooling Analysis (except the Palo Verde natural circulation cooldown test), Confirmatory Issue 1 of Supplement 2 to the SER, NUREG-0852 (SER-2).	NRC letter dated June 4, 1985.
2. Steam Generator Tube Rupture Analysis, Confirmatory Issue 2 of SSER-2.	C-E letters LD-85-012 and LD-85-013. NRC letters dated March 26, 1985 and June 4, 1985.
3. Statistical Combination of Uncertainties, Confirmatory Issue 3 of SSER-2.	NRC letters dated March 22, 1984 and March 26, 1985.
4. Inadequate Core Cooling Instrumentation, Confirmatory Issue 4 of SSER-2.	NRC letters dated October 11, 1984 and March 26, 1985.
5. Removal of Pipe Whip Restraints, Item 6(a) of FDA-2.	NRC letters dated October 11, 1984 and March 26, 1985.
6. Tests of Load Limiting Devices, Section 3.9.1 of the SER, NUREG-0852.	NRC letter dated March 26, 1985.
7. Comprehensive Vibration Assessment Program, Section 3.9.2 of SSER-2.	NRC Letter dated June 4, 1985.
8. Technical Specifications, CESSAR-F	NRC Letter dated June 4, 1985.
9. Control Rod Drop Test Requirement, C-E letter LD-83-030.	NRC letters dated March 26, 1984 and March 26, 1985.
10. Shutdown Cooling System Relief Valve Operability, NRC letter dated April 24, 1984.	NRC letter dated March 26, 1985.
11. CESSAR Chapter 14 Changes, C-E letter LD-84-060.	NRC letter dated March 26, 1985.
12. CESSAR consistency Review Changes, C-E letter LD-84-061.	NRC letters dated March 26, 1985 and June 4, 1985.

<u>Issue</u>	<u>Reference for Status</u>
13. CESSAR Amendment 9 Revisions, C-E letter LD-84-012.	NRC letters dated March 26, 1985 and June 4, 1985.
14. CESSAR Amendment 10 Revisions, C-E letter LD-84-070.	NRC letters dated March 26, 1985 and June 4, 1985.
15. CESSAR/Palo Verde Independent Audit, C-E letter LD-85-004.	NRC letters dated March 26, 1985 and June 4, 1985.
16. CESSAR Revisions From Palo Verde 1 Startup Experience, C-E letter LD-85-014.	NRC letter dated June 4, 1985.
17. RCS Rapid Depressurization, Supplement 1, Chapter 5 to the SER, NUREG-0852.	NRC letter dated November 15, 1984.
18. EFW Waterhammer Test Acceptance Criteria, C-E letter LD-85-022.	NRC letter dated June 4, 1985.
19. System 80 Safety Valves - Increased Blowdown, C-E letter LD-85-029, June 4, 1985	NRC letter dated June 4, 1985.
20. Additional CESSAR FSAR Clarifications, C-E letter LD-85-028, May 31, 1985	

List of Correspondence on the CESSAR-F Docket,  
Subsequent to Supplement 2 of NUREG-0852, Which is Related  
to the Amendment of the CESSAR FDA

<u>Letter No.</u>	<u>Date</u>	<u>Subject</u>
LD-83-066	July 22, 1983	SG Tube Rupture Analysis
LD-83-068	August 3, 1983	System 80 Core Bypass Flow
LD-83-073	August 11, 1983	CESSAR-F Revised Pressurizer Relief Valve Blowdown Analysis
LD-83-074	August 12, 1983	Natural Circulation Cooldown Re-analysis for CESSAR-F
LD-83-076	August 19, 1983	CESSAR, Statistical Combina- tion of Uncertainties
LD-83-080	August 30, 1983	CESSAR-F Test Requirements
LD-83-082	August 31, 1983	CESSAR-SER Item 7, Second Response
LD-83-085	September 9, 1983	Impact of PVNGS Hardware Problems on CESSAR-F
LD-83-087	September 20, 1983	CESSAR-F Standard Technical Specifications
LD-83-039	September 30, 1983	Referenceability of CESSAR-F FDA
LD-83-096	November 9, 1983	Rapid Depressurization for C-E plants
LD-83-105	December 20, 1983	CESSAR-F Load Limiter Tests
LD-83-108	December 23, 1983	Basis for Design of Plant Without Pipe Whip Restraints
LD-84-008	February 16, 1984	Comprehensive Vibration Assessment Program
LD-84-009	February 2, 1984	Block Valves on Atmospheric Dump Valves
LD-84-012	March 16, 1984	CESSAR-F Amendment Number 9
LD-84-013	March 22, 1984	Safety Grade Reactor Coolant Gas Vent System
LD-84-022	May 25, 1984	Shutdown Cooling System Relief Valves
LD-84-041	August 3, 1984	Single Failure of Auxiliary Pressurizer Spray
LD-84-042	August 3, 1984	Safety Evaluation Report Corrections
LD-84-049	September 7, 1984	SCS Relief Valve Operability
LD-84-051	September 18, 1984	CESSAR Confirmatory Issues 1 and 2
LD-84-055	September 28, 1984	Confirmatory Issue 4

<u>Letter No.</u>	<u>Date</u>	<u>Subject</u>
LD-84-060	October 16, 1984	CESSAR Startup Testing Revisions
LD-84-061	October 22, 1984	CESSAR Consistency Review Changes
LD-84-064	November 6, 1984	CESSAR Inconsistencies
LD-84-069	December 5, 1984	CESSAR Consistency Review Changes
LD-84-070	December 5, 1984	CESSAR Amendment 10
LD-84-074	December 13, 1984	Shutdown Cooling System Relief Valve Operability
LD-85-004	January 11, 1985	CESSAR Inconsistencies
LD-85-007	February 22, 1985	Review of CESSAR Information
LD-85-009	March 7, 1985	Comprehensive Vibration Assessment Program
LD-85-012	March 15, 1985	Atmospheric Dump Block Valves
LD-85-013	March 22, 1985	Confirmatory Issues 1 and 2
LD-85-014	March 22, 1985	CESSAR-F Revisions
LD-85-016	April 2, 1985	CESSAR Appendix 5A Revision
LD-85-019	April 25, 1985	CESSAR Chemistry Limits
LD-85-020	April 26, 1985	CESSAR Technical Specification Review
LD-85-021	April 26, 1985	High and Low Pressure Safety Injection Flow
LD-85-022	April 30, 1985	Request for Information, CESSAR Amendment 9
LD-85-024	May 16, 1985	CESSAR Technical Specifications
LD-85-028	May 31, 1985	CESSAR FSAR Clarifications
LD-85-029	June 4, 1985	System 80 Safety Valves, Increased Blowdown