

January 29, 1992 LD-92-008

Docket No. 52-002

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

Subject:

Response to NRC Requests for Additional Information

Reference:

- (A) Letter, Reactor Systems Branch RAIs, T. V. Wambach (NRC) to E. H. Kennedy (C-E), dated December 24, 1990
- (B) Letter, Reactor Systems Branch RAIs, T. V. Wambach (NRC) to E. H. Kennedy (C-E), dated January 31, 1991
- (C) Letter, Reactor Systems Branch RAIs, T. V. Wambach (NRC) to E. H. Kennedy (C-E), dated May 13, 1991
- (D) Letter, Reactor Systems Branch RAIs, T. V. Wambach (NRC) to E. H. Kennedy (C-E), dated August 21,1991
- (E) Letter, Plant Systems Branch RAIs, T. V. Wambach (NRC) to E. H. Kennedy (C-E), dated October 10, 1991
- (F) Letter, Risk Assessment Branch RAIs, T. V. Wambach (NRC) to E. H. Kennedy (C-E), dated October 30, 1991

Dear Sirs:

References (A) through (F) requested additional information for the NRC staff review of the Combustion Engineering Standard Safety Analysis Report - Design Certification (CESSAR-DC). Enclosure I to this letter provides our responses to a number of these questions.

ABB Combustion Engineering Nuclear Power

Shorld you have any questions on the enclosed material, please contact me or Mr. Stan Ritterbusch of my staff at (203) 285-5206.

Very truly yours,

COMBUSTION ENGINEERING, INC.

E. H. Kennedy

Director

Nuclear Systems Licensing

gdh/lw

Enclosures: As Stated

cc: J. Trotter (EPRI) T. Wambach (NRC) RESPONSE TO NRC REQUESTS FOR ADDITIONAL INFORMATION
REACTOR SYSTEMS BRANCH,
PLANT SYSTEMS BRANCH,
RISK ASSESSMENT BRANCH

Questions

440.16(a), 440.16(b), 440.16(c), 440.16(d), 440.16(f), 440.16(g), 440.16(h), 440.16(i), 440.16(j), 440.35, 440.86(f), 440.91, 440.129, 440.130, 440.131, 440.132, 440.133, 440.134, 440.135, 440.136, 440.137, 440.140, 440.141, 440.142, 440.143, 440.144, 440.145, 440.146, 440.147, 440.148, 440.149, 440.150, 440.151, 410.103(g), 410.104(d), 410.107(a), 410.107(b), 410.107(c), 410.107(d), 720.98, 722.94

These questions are related to the issue of shutdown risk.

Response

This response applies to the above questions.

Resolutions to shutdown risk issues will be provided in a separate submittal of the System 80+ Shutdown Risk Evaluation Program Report scheduled to be completed in August, 1992. The report will address shutdown issues as presented to the NRC at the December 18, 1991 meeting. In order to support the staff's review schedule, C-E will provide an interim report in May, 1992 and will support meetings with the staff to provide periodic updates of our progress.

The report will cover the following topics:

- Procedures
- Technical Specification Improvement
- Mid-loop Operation
- Loss of Decay Heat Removal
- Primary/Secondary Containment Capability and Source
- Rapid Boron Dilution
- Fire Protection
- Instrumentation
- ECCS Recircula on Capability
- Effect of PWR Upper Internals
- Fuel Handling and Heavy Loads
- Potential for Draining the Reactor Vessel
- CESSAR-DC Chapter 15 Non-LOCA Events/LOCA Dose
- CESSAR-DC Chapter 6 Loss of Coolant Accidents
- CESSAR-DC Chapter 6 Containment Analysis
- Probabilistic Risk Assessment

Based on our meeting with the staff on December 18, 1991, we believe this report will resolve staff concerns regarding shutdown risk for the System 80+ design.