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MAY 22 1985

MEMORANDUM FOR: Dennis L. Ziemann, Chief
Procedures and Systems Review Branch
Division of Human Factors Safety

THRU: Original signed by Gerald R. Mazetis, Section Leader
Section B - Systems
Procedures and Systems Review Branch
Division of Human Factors Safety

FROM: Thomas A. Greene
Section B - Systems
Procedures and Systems Review Branch
Division of Human Factors Safety

SUBJECT: SUMMARY OF MEETING WITH COMBUSTION ENGINEERING
OWNERS GROUP REPRESENTATIVES FOR EMERGENCY
PROCEDURE GUIDELINES

A meeting between Combustion Engineering Owners Group (CEOG) for emergency procedure guidelines (EPGs) and NRC staff was held at 9:00AM on Tuesday, April 23, 1985, in Room AR-5035 of the Air Rights Building. Enclosed is a list of attendees. The purpose of the meeting was to discuss (1) PSRB comments on draft Set 1 of Rev. 03 to CEOG Generic Emergency Guidelines, (2) the review process and schedule, and (3) RRAB comments on the CEOG PRA contained in Appendix B to Set 1 of CEN-152. Below is a summary of the meeting highlights:

- A. PSRB representatives pointed out the following five areas of major concerns with the current submittal:
1. There is no guidance in the EPGs to instruct the operator what to do, if following an accident, the containment pressure continues to increase and there is a possibility of exceeding the design limit.
 2. For those plants that do not have hydrogen recombiners, there is no guidance on when to initiate action to obtain recombiners, nor is there guidance on when these recombiners should be put in service. Paragraph 50.44 of 10 CFR 50 requires such plants to have the capability to install an external recombiner.
 3. The EPGs instruct the operator to purge the containment if the hydrogen concentration exceeds 3.5%. The staff indicated that further consideration should be given to include guidance on the amount of radiation associated with purging. For example, if a high level of radioactivity existed inside containment and the hydrogen concentration was approaching 3.5%, purging the containment at 3.5% could be premature if the containment was able to withstand a hydrogen burn.

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MAY 22 1985

Dennis L. Ziemann

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4. The staff indicated that further consideration should be given in the guidelines to using containment spray for hydrogen control. The staff indicated that operating the containment sprays would help assure that the hydrogen in the containment atmosphere would be at a uniform concentration, i.e., there will not be pockets of high hydrogen concentration. Also, the sprays probably would effect the extent and rate of combustion. If there was a hydrogen burn, then sprays are the best mechanisms to lower the containment temperature. The adverse effect of using the spray for hydrogen control is if there is a burn at lean concentration, a higher pressure will be produced with spray than without sprays.
5. The guidelines require the operator to take some actions when the hydrogen concentration reaches a specified percent. The staff noted that the percent specified in the guideline should be the same value that the operator reads from the instrument in the control room.

The CEOG stated that they would consider our concerns and revise the guidelines if appropriate.

- B. The staff and the CEOG discussed the schedule for the formal submittal of Set 1 to CEN-152. The tentative milestone dates are:
 1. May 17, 1985 - The staff (CSB) comments on the hydrogen guidelines are to be given to the CEOG.
 2. May 31, 1985 - The CEOG will submit formal final version of Set 1.
 3. June 21, 1985 - The staff will complete an SER on Set 1.
 4. June 26, 1985 - CEOG will submit a draft version of Set 2 to the staff.
- C. The CEOG asked when the SER on Rev. 02 to CEN-152 would be published. They were informed it was published on April 16, 1985, and sent to Mr. Wells. The representative at the meeting was given a copy of the SER.
- D. RRAB (S. Davis) discussed concerns with the review of the CEOG PRA study. It was pointed out that the number for initiating event and accident sequence frequencies given in Appendix B to CEN-152 did not agree with the frequencies in the reference cited, "CEN-239, Supplement 1." It was agreed that a telephone call would be set up between RRAB and the CEOG to try to resolve the discrepancy.

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The use of 10^{-6} as a cutoff frequency for initiating event was discussed. The use of 10^{-6} by the CEOG is based on 1% of the Safety Goal. The Safety Goal pertains to core melt frequencies and not to initiating events. RRAB stated that the staff had no policy on what was an acceptable cutoff frequency for initiating event when considered alone. There are other factors to consider when making decisions about these events, i.e., events which have potential for radiological release directly to the environment.

- E. T. Greene of PSRB discussed a number of comments on Set 1. These consisted of mostly minor technical and editorial concerns.

Original signed by
Thomas A. Greene
Section B - Systems
Procedures and Systems Review Branch
Division of Human Factors Safety

Enclosure:
List of Attendees

cc w/enclosure:
P. Nelson, CE

DW/TAG2/CE MEETING SUMMARY

OFFICE	DHFS:PSRB	DHFS:PSRB					
SURNAME	TAGreene:ah	GRMazetis					
DATE	5/22/85	5/24/85					

LIST OF ATTENDEES

APRIL 23, 1985

Combustion Engineering Owners Group Representatives

G. Bischoff
P. Nelson
G. Max

NRC

D. Ziemann (Part-Time)
G. Mazetis
T. Greene
C. Tinkler (Part-Time)
S. Davis (Part-Time)

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