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PROPUSED BULE PR -50(43FR 57/52)

Secretary of the Commission U. S. Nuclear Regulatory Commission Washington, D. C. 20555

ATTN: Docketing and Service Branch

Subject: Proposed ECCS Rulemaking

Dear Sir:

February 13, 1979

LD~79-013



Combustion Engineering has reviewed the Commission's proposed program for ECCS rulemaking (Federal Register, Vol. 43, No. 235, December 6, 1978). The proposed changes are categorized as Phase 1 (procedure oriented changes) and Phase 2 (new information changes). Our preliminary comments on the two phases are contained Lerein.

The Phase 1 changes can be further delineated as those changes relating to reanalysis requirements and changes relating to specific assumptions in the analyses. We agree with the proposed changes to 10 CFR 50.34 which would allow certain corrections to vendor ECCS computer analysis codes to be made without a complete reanalysis of ECCS performance until the operating license review. The technical maturity attained in working with these codes for over five (5) years has provided the analysts of both the vendor and the NRC Staff with the ability to ascertain the effect of a code change on the ECCS performance.

The proposed changes to specific assumptions in the analysis - namely, return to nucleate boiling and steam cooling requirements for flooding rates below one incn per second - are in agreement with technical positions we have previously presented to the NRC Staff. Therefore, we do not disagree with these changes now. However, we strongly recommend that, since the changes to these assumptions are expected to have minimal effect on the ECCS performance, the change not be made mandatory.

Specifically, we recommend that the vendors be allowed to operate codes with either the old or new assumptions on nucleate boiling and steam cooling. This is recommended since changing these assumptions involves code changes of moderate complexity. We would defer these changes and accumulate a number of potential code changes before modifying the code. We believe that this will minimize cost and coding problems as well as reducing NRC staff review effort.

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Phase 2, the long term proposed rule change, has not as yet been developed in depth by the staff. Since the information available for our evaluation of Phase 2 is very general, we intend to defer detailed comments until the staff provides specific proposals for amending the rule.

Our only comment, at this time, concerns the ultimate objectives of Phase 2. The notice in the Federal Register states "(T)he technical changes would be in the direction of improving the realism of ECCS licensing evaluation in the light of present knowledge, while preserving a level of conservatism consistent with that knowledge, while preserving a level of conservatism gonesistent with that knowledge. C-E believes that current licensing models incorporate sufficient margin to account for the uncertainties in the bases used to establish the initial rule. This margin is augmented by the NRC's imposed conservatisms. We agree that the present level of conservatism should be preserved, but we expect that the new data and accumulated experience will identify and remove some of those uncertainties. Thus, C-E believes higher allowed peak linear heat generation rates should be allowed to result from the improved realism.

In summary, C-E supports the intent of Phase 1 of the proposed rule change. Additionally, we hope to provide more detailed comments on Phase 2 as the staff's position becomes more defined.

Combustion Engineering appreciates the opportunity to comment on the ECCS proposed rulemaking and would be pleased to provide additional comments and suggestions whenever appropriate.

Very truly yours,

COMBUSTION ENGINEERING, INC.

A. E. Scherer

Licensing Manager

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