



October 6, 1995  
LD-95-026

Docket 52-002

Attn: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

**Subject: System 80+™ Probabilistic Risk Assessment**

Dear Sirs:

The System 80+ Final Safety Evaluation Report (FSER) has been widely distributed in the U.S. and abroad. This FSER has been well received and feedback has demonstrated that the FSER is a detailed document that authoritatively addresses safety issues. However, one item in the Probabilistic Risk Assessment (PRA) has been significantly mis-interpreted, and ABB-CE, therefore, requests that the NRC provide an additional explanation of the PRA results. This request is only for clarification and does not impact the conclusions of the evaluation already reported in the FSER.

The System 80+ base case core damage frequency (CDF) assumes reactor vessel failures are of low-probability, but credible, and that common cause failures are also credible. These base case results have been misused by comparing them to PRA results reported to NRC by other designers that assume reactor vessel and common cause failures are incredible. Section 19.10.10 of CESSAR-DC describes System 80+ CDF sensitivity to assumptions on reactor vessel rupture and common cause failures. System 80+ results, assuming that reactor vessel and common cause failures are incredible, are presented in Table 19.10-1, item 10C.

To avoid future misrepresentation, it would be most helpful if NRC staff issued a letter and/or FSER supplement stating that, based on the sensitivity results presented in Table 19.10-1 item 10C, the System 80+ CDF is reduced from 1.67E-06 events/year to 1.41E-07 events/year. In addition, it may be appropriate to alert readers that comparisons of PRA results, if done at all, require careful review to ensure that equivalent assumptions are used.

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ABB Combustion Engineering Nuclear Systems

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Please call me or Mr. Stan Ritterbusch at 203-285-5206 if you have any questions.

Very truly yours,

COMBUSTION ENGINEERING, INC.

A handwritten signature in cursive script that reads "S. E. Ritterbusch for". The signature is written in dark ink and is positioned above the typed name of the signatory.

C. B. Brinkman  
Director  
Nuclear Systems Licensing

cc: S. Magruder (NRC)  
N. Fletcher (DOE)