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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

AUG 6 1979

Generic Task No: A-17

MEMORANDUM FOR: Stephen H. Hanauer, Director, Unresolved Safety Issues Program

FROM:

John Angelo, Task Manager, Generic Task No. A-17

SUBJECT:

FAULT TREES FOR THE REACTOR COOLANT PRESSURE BOUNDARY (RCPB)
SAFETY FUNCTION FOR GENERIC TASK NO. A-17, SYSTEMS INTERACTION

IN NUCLEAR POWER PLANTS

Enclosed are copies of the Figure 5.3 series of fault trees which depict the reactor coolant pressure boundary (RCPB) safety function. This series of fault trees was completed by Sandia Laboratories during the month of July 1979 and are currently under review and evaluation by members of the Unresolved Safety Issues Program assigned to Task A-17 and by other selected persons. The fault trees will be discussed with Sandia Laboratories at a meeting to be held on August 8-9, 1979 in Albuquerque, New Mexico.

Any corrections to the fault trees that may arise because of the NRC staff review, or as a result of further work by Sandia Laboratories, will be made to the computer code so that subsequent analysis of the fault tree using the Set Equation Transformation System (SETS) will be based on the corrected fault trees. Sandia Laboratories does not propose to replot the fault trees until the final version is plotted for the final report on Phase I of this task. We intend to make hand-written changes to the fault trees in the interim until the final plots are made. However, if the corrections turn out to be extensive, we may reconsider this proposal. I intend to notify holders of copies of the fault tree what hand-written changes should be made to keep their copies current.

Copies of these fault trees are being given a limited distribution. A number of additional copies will be held in the Task Manager's office for inspection or loan to persons on the distribution list for this memorandum who are not recipients of the fault trees. All persons on the distribution list for this memorandum are invited to present their comments or questions to the Task Manager.

Sandia Laboratories is now working on fault trees for the other two safety functions: Decay Heat Removal (DHR) and Reactor Subcriticality (RS).

John Angelo, Task Manager

Generic Task A-17

Enclosure: Fault Trees on RCPB

Figures 5.3, 5.3-1 through 5.3-7

cc w/enclosure: See next page

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