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TO: Dr. Wm. Kerr, Chairman

ACRS Subcomm. on Adv. Reactors

U S Nuclear Regulatory Comm.

Washington, D C 20555

Pm: Sidney Siegel, Consultant

Comments on ACRS Subcommittee Meeting, August 7, 1979

have only brief comments on the subjects discussed during the August 7th meeting. In general, the work described appears to be progressing satisfactorily or better and merits continued support.

The analytical modeling program at ANL described by Dr. Sha is gratifyingly elegant, and is giving results directly useful for a more detailed understanding of fuel element behavior. Contrariwise, the fuel element failure modeling described by Dr. Pizzica, and the comparison calculations vis-a-vis foreign codes, left me with an impression of numerical, but not real-life, progress. The LMFBR experimental program at BNL appears to be intrinsically good work, but its applicability to actual reactor situations may only be indirect. Numerous important physical questions remain unresolved; further exploration of these seems justified if budgets permit.

In view of the currently ambivalent status of the LMFBR here in the U S, and yet the prospect that it may again become an important program in the near future, I believe it is desireable that LMFBR safety research continue at a healthy level. Perhaps the greatest immediate value of such a stance is ensuring that we remain a peer among the numerous active foreign programs, technical access to which is of the utmost importance. This criterion, that we conduct programs here which maximize our access to and best complement these large programs abroad, should have high priority.

The Three Mile Island accident deserves the most thorough scrutiny and analysis we can apply to it. Research bearing
on this event deserves the highest priority among all efforts,
and those LMFBR programs which can be redirected meaningfully
toward TMI questions should be addressed toward those at once,

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even if LMBR progress is thereby delayed. The codes developed at ANL ar BNL, described at the meeting, should be applicable with relatively modest alterations. Such analyses of TMI may well provide the best opportunity to validate the codes and understand how well they can describe reality that we will ever have.

Although there was no discussion of Gas-Cooled Reactor safety research at the meeting, I take this occasion to state my belief that this area of work should be terminated promptly in an orderly fashion. The resources freed should be reallocin an orderly fashion. The resources freed should be reallocing ated to more pressing issues, TMI right now, the LMFBR as a long-term continuing effort.

Copy to Richard Savio