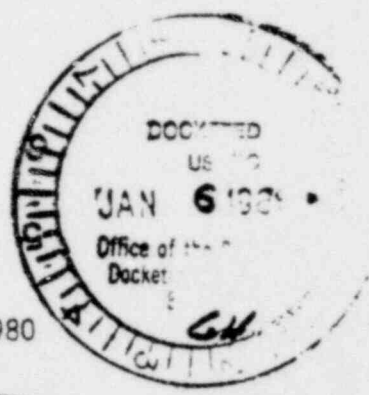


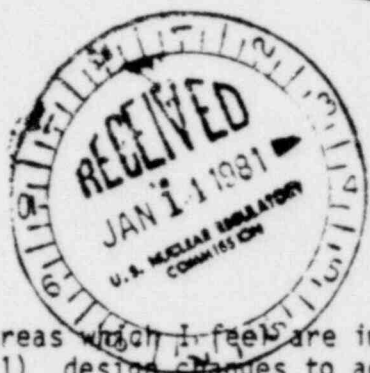
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ALCKET NUMBER PR50
MONITORED RULE
45FR65474



December 30, 1980

Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555
Attention: Docketing and Service Branch



Dear Sir:

I wish to comment in two particular areas which I feel are important to the outcome of Degraded Core Rulemaking: 1) design changes to accommodate core meltdowns and 2) the operator-plant interface.

1. Design changes such as the filtered-vented containment, delay bed, active core retention, etc., should be thoroughly evaluated prior to mandating installation. This evaluation should be in the form of risk-cost-benefit analyses (RCBA). These RCBA's must be translated into direct dollar cost to the public in the form of increased or new taxes, increased utility rates, delayed power production costs, and potential deaths averted.

2. The operator must be recognized as the key to safe plant operation. To accomplish this, improved training coupled with improved information display techniques and early problem detection are needed.

Informational display techniques used for military tactical systems should be considered. As an example, in the early 1960's military sensor systems used in various U.S. Naval aircraft tactical systems had reached a point where the operators of these systems became overwhelmed with the amount of information provided (a situation not unlike that which may have occurred at TMI). It was found that in fast changing situations, as much as 70% of the incoming information could not be used--the operator was too busy to look at it. Worst of all, the operator often could not be sure he was ignoring the least useful information or manipulating the most useful information in the right way. To deal with this, human factor studies were implemented and the result was a design philosophy which started from the premise that the all-important key to system operation was the operator. The new system designs included informational flow which did away with the need to sort through a flood of raw data in order to pick out the most important information. The present improved systems now display the information in a form which can be used immediately. The operational heart is an interactive system which can call up important combinations of information or other items such as emergency check lists on the request of the operator.

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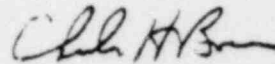
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In addition, recent advances in low frequency acoustic detection devices (both classified and unclassified) used by the military should be evaluated as to their applicability.

It is my belief that the safety of nuclear plants is paramount; however, it must not be over-emphasized to the point where the industry is unable to operate and expand. To this end, I urge reasonable restraint be exercised in the imposition of rules and requirements in the degraded core rulemaking.

Sincerely,



Charles H. Bowers, CDR, USNR
9 So. 610 Main Street
Downers Grove, IL 60516

CHB:kr