



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

ACRS R-0992

August 12, 1980

Honorable John F. Ahearne  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

SUBJECT: NEW UNRESOLVED SAFETY ISSUES

Dear Dr. Ahearne:

During its 244th meeting, August 7-9, 1980, the ACRS discussed with the NRC Staff their selection of new Unresolved Safety Issues.

We agree that the items suggested by the Staff deserve the priority of study that they will receive if they are classified as Unresolved Safety Issues. In addition, we believe the following should be added to the list.

1. DC Power Supply Reliability - This issue is currently being addressed and may be resolved in the near future, but it should be carried as unresolved until resolution is clearly achieved.
2. Single Failure Criterion - Many current safety evaluations use the single failure criterion as a measure of reliability. Its inadequacy is widely recognized. It should be replaced, where feasible, with criteria that consider the possible contributions to risk of multiple failures.
3. Control System Reliability - Recent experience has indicated that more attention must be given to reactor control system reliability. Most safety analyses in the past have given minimum attention to control system reliability based partly on the assumption that failure of the system makes it unavailable and ignores the fact that this failure may actually produce an unsafe mode of reactor behavior. This problem should receive further study to determine appropriate reliability standards for control systems. Appropriate reliability of nonsafety system information displayed for use of the reactor operator is a related important issue.

We believe there are two potential problems with the Staff's method of choosing candidate items for the Unresolved Safety Issues list. First, because of the manner by which items must be sponsored by specific units of the Staff, the procedure may tend to miss important problems which are complex and not yet clearly defined. Second, the possibility that a problem may be resolved in six

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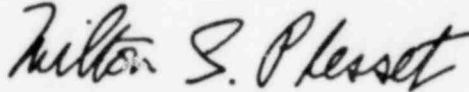
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months does not mean that it will be resolved and should not be grounds for its exclusion from the list. Assignment of such an item to Unresolved Safety Issues status may make its resolution more probable.

Sincerely,



Milton S. Plesset  
Chairman

Reference:

U.S. Nuclear Regulatory Commission Staff Paper, "Special Report to Congress Identifying New Unresolved Safety Issues," SECY-80-325, dated July 9, 1980.