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Mr. James M. Taylor
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Taylor:

SUBJECT: REVISED GUIDELINES FOR PRIORITIZATION OF GENERIC
SAFETY ISSUES

During the 391st meeting of the Advisory Committee on Reactor Safeguards, November 5-7, 1992, we reviewed a proposed draft Revision 4 of NUREG-0933, "A Prioritization of Generic Safety Issues." Our Subcommittee on Safety Philosophy, Technology, and Criteria considered this matter during a meeting on October 28, 1992. During these meetings, we had the benefit of discussions with representatives of the NRC staff, and of the documents referenced.

As part of the program for resolution of Generic Safety Issues (GSIs), the staff historically has attempted to prioritize the issues in order to appropriately focus resources. After considerable experience (9 years) in using this prioritization methodology, the staff has concluded that the conservatisms provide too much margin and that "resources appeared to have been devoted to resolving a large number of issues with no safety improvement resulting."

The revised guidelines being proposed by the staff are intended to reduce the perceived excessive margins in the prioritization criteria, presumably so that a higher fraction of those issues subjected to the full Regulatory Analysis (RA) would also require some regulatory action as a result of the RA. The staff's proposal is to modify the "prioritization formula" by increasing the risk-reduction thresholds by an order of magnitude (10X) and to simplify the way in which costs enter into the priority ranking.

We agree with the basic concepts that underlie a prioritization scheme based on risk reduction potential and impact/value criteria, but believe additional work is needed before the specific proposed modifications are brought to the Commission for approval.

The proposed modifications are mostly arbitrary and do not have firm technical bases. We submit that the objective of such a prioritization scheme should be to essentially capture as many as possible of those issues for regulatory analysis that will result in some regulatory action (i.e., would pass the RA criteria) while at the same time screening out as many issues as possible that would not pass the RA criteria. This is not an easy objective to accomplish because, with any scheme approximating risk and costs, some significant issues that would have required regulatory action will likely be lost (relegated to LOW or DROP priority) whereas

some number of issues that will not require any regulatory action will be prioritized to be given an RA.

The proposed modifications will surely result in a much higher percentage of "hits" but will also likely result in a higher number of issues being discarded that would have proven to have been significant if given an RA.

We recommend that all of those GSIs that have already been given a full regulatory analysis with the result being that regulatory action was called for (there are apparently 16 of these) be placed on the decision chart grid (impact/value vs. delta-risk) and that empirical boundaries be drawn for thresholds that would capture all of these. For insight, it would be useful also to put on the grid all the other already-screened issues. This empirical determination of the thresholds will not guarantee optimization of the process for future issues, but we think it would go a long way toward removing the arbitrariness of the proposed thresholds presented in the draft document.

Sincerely,

Paul Shewmon
Chairman

Reference:

Memorandum dated August 5, 1992 (corrections dated August 19, 1992), from C. J. Heltemes, Jr., Office of Nuclear Regulatory Research, for Raymond F. Fraley, Advisory Committee on Reactor Safeguards, Subject: Request for ACRS Review of Revised Guidelines for Prioritization of Generic Safety Issues, transmitting:

- (a) Draft SECY paper for the Commission from James M. Taylor, Executive Director for Operations, Subject: Revised Guidelines for Prioritization of Generic Safety Issues (Predecisional)
- (b) Draft Markup of Introduction Section, NUREG-0933, Revision 4, "A Prioritization of Generic Safety Issues," August 5, 1992 (Predecisional)