

Comment on Volume I

Section 3.0 "Methods Used For Mitigative Measures Assessment" states:

"... Mitigation measures treated in SOARCA include the licensee's emergency operating procedures (EOPs), severe accident management guidelines (SAMGs), and 10 CFR 50.54(hh) mitigation measures. 10 CFR 50.54(hh) mitigation measures refer to additional equipment and strategies required by the NRC ..."

The application of 10 CFR 50.54(hh) mitigation measures still concerns a number of staff in NRR. The concern involves the manner in which credit is given to these measures such that success is assumed. It is understood that the radiation exposure results in Volumes III and IV are computed both ways – with and without 10 CFR 50.54(hh) credit in order to show the difference. It is also observed that only unmitigated results are given in the executive summary. However, these measures are to be taken after both EOPs and SAMGs fail. There seems to be acceptance of credit for both EOPs and SAMGs because they are both written and practiced procedures. On the other hand, 10 CFR 50.54(hh) mitigation measures are just equipment onsite that can be useful in an emergency when used by knowledgeable operators if post event conditions allow. If little is known about these post event conditions, then assuming success is speculative.

Although operator errors or failures were accounted for in the SPAR model (including the EOPs) that generated the CDFs used in the results, the SAMGs and 10 CFR 50.54(hh) mitigation measures were assumed to be dependent on equipment resources alone. Although Surry and Peachbottom appear to have exceptional programs for their 10 CFR 50.54(hh) compliance, they may not be representative of the industry in general.

A quantitative evaluation of SAMGs and 10 CFR 50.54(hh) operator actions may be impractical due to a lack of defined actions. Therefore, credit given for 10 CFR 50.54(hh) mitigation measures should be qualified in the text to indicate the uncertainty in the outcome of these measures. Specifically, in the Volume I Executive Summary sections addressing "Mitigation Measures" under "Method" along with "Results and Conclusions" should contain a caveat that although successful mitigation is considered reasonable in most cases, the assumption of success is not universal and only the unmitigated cases are presented in this Executive Summary. A similar statement would be appropriate for Volume I section 1.4.3 "Mitigated and Unmitigated Cases" and Volume I Section 3.0 "Methods Used For Mitigative Measures Assessment".

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