

March 09, 2001

MEMORANDUM TO: William D. Beckner, Acting Chief
Generic Issues, Environmental, Financial and Rulemaking Branch
Division of Regulatory Improvement Programs

FROM: Eileen M. McKenna, Senior Reactor Engineer/**RA**/
Generic Issues, Environmental, Financial and Rulemaking Branch
Division of Regulatory Improvement Programs

SUBJECT: SUMMARY OF PUBLIC WORKSHOP ON "OPTION 2" - RISK-
INFORMING SPECIAL TREATMENT REQUIREMENTS IN
10 CFR PART 50

On February 21-22, 2001, NRC conducted a public workshop on Option 2, an activity intended to develop an alternative set of regulations that would vary treatment requirements applied to structures, systems and components, based upon a risk-informed categorization process. The attendees at the meeting are listed in Attachment 1. Attachment 2 is the slides used by the NRC staff that summarize the objectives, agenda and discussion topics for the workshop. Attachment 3 is the presentation materials used by other workshop participants, including those used by Frank Miraglia, Deputy Executive Director, during his keynote remarks.

Following opening remarks, the keynote address focused upon the overall direction of risk-informed regulation at NRC. This served as a backdrop for the workshop that was directed at one initiative, commonly known as "Option 2" of 3 options for risk-informing 10 CFR Part 50. The objectives of the workshop were to inform stakeholders of status and to solicit input on several topics important to the Option 2 rulemaking.

Presentations were made by representatives of the Boiling Water Reactor Owners Group, the Westinghouse Owners Group and the Combustion Engineering Owners Group (CEOG) about their pilot plant activities. The first two are somewhat farther along in the pilot process than the CEOG. Pilot plants and the set of systems to be categorized as part of the pilot have been selected by the Owners Group. Other efforts have focused upon identifying what program and process changes would be needed to implement the approach, and also to understand the cost-benefit implications.

Presentations were also made by representatives of ASME task groups who are working on code cases in the areas of risk-informed classification for repair and replacement activities, and for alternative repair/replacement rules to apply to low safety-significant structures. Systems and components (SSC). They noted that for purposes of repair and replacement (where the physical condition of the component could be modified, as compared to inservice inspection activities), the risk categorization focuses only upon consequences and not failure potential. It is expected that the classification code case will be tested by some pilot plants over the next few months.

NEI stated that their approach with the industry guidelines and other supporting information generated for Option 2 is to document why they believe commercial seismic standards, environmental qualification (EQ) experience and the Code cases are sufficient treatment for low safety-significant SSC. NEI stated that it was working with EPRI to develop the supplemental information for the seismic and EQ areas that they would provide to NRC at a later date. NEI also expressed concern with a categorization issue arising in the South Texas exemption review about consideration of large late releases. There was significant discussion on this issue with some commenters stating that late containment failure is not tied to quantitative health objectives in the safety goal, and it was unclear how a licensee would make the categorization decision for particular SSC that contribute to containment performance. The staff has indicated that functionality of SSC that contribute significantly to containment performance is part of defense-in-depth and therefore that this is consistent with the principles in Regulatory Guide 1.174. The staff also indicated that it wanted the integrated decision panel to at least consider the impact of the SSC on containment performance. A separate public meeting to discuss this topic in more detail was suggested.

During the session on February 22, the participants discussed specific topics (as noted in the attached slides). For instance, the group discussed what form of submittal and what type of NRC review would be appropriate for a licensee proposing to implement the Option 2 approach. The model of risk-informed inservice inspection requests, with a letter from the Director of NRR approving the request, was suggested.

The staff raised the issue of the risk-informed safety classification (RISC) "box chart." That is, whether the division between the RISC-1 and RISC-2 boxes should be based on whether the SSC are safety-related, or are "important to safety." Some stakeholders expressed concern about complexity and difficulty in explaining the concept. A more fundamental concern is the relative extent of requirements that would result for the RISC-3 box. That is, requirements beyond the existing treatment might be imposed on SSC "important to safety" that are of low significance. It became evident through comments made by industry representatives that if treatment issues are dealt with in a manner that minimizes the need for new program requirements, the debate about the box chart would likely evaporate.

There was some discussion about selective implementation of SSC and of rules. As noted during discussions on the review process, what is being approved (the essence of Option 2) is a process for categorization of SSC and adjustment of treatment of SSC that will be occurring over a period of years. Once initial investments in the PRA and other development needs are met, licensees would be motivated to complete the process so that they are not under multiple programs longer than needed. Since functional requirements still exist for the SSC regardless of whether under existing rules or under the new 50.69 (Option 2), selective implementation for SSC may turn out not to be a concern. It was also noted that many of what would become the RISC-2 requirements are already in place as a result of the maintenance rule. Thus, there is no imbalance where licensees would select RISC-3 SSC before RISC-2 SSC during implementation. Similarly, licensees would likely apply the process to all of the rules within the scope of the new 50.69 for a similar reason. There may be exceptions, as for instance, inservice inspection, where the categorization process is not well suited to the adjustments, such that a different means of risk-informing the requirements might be undertaken.

In the area of treatment, considerable comment was voiced about what was known of the interchanges with South Texas on their exemption request. For example, there was the view that what was being expected for "inservice" testing for RISC-3 SSC was more stringent than is currently required for RISC-1 SSC. The view was expressed that the "show me how" and the "absolute" level of assurance that seemed to be requested to support the exemption was not consistent with the Option 2 intent for low safety-significant SSC. The topic of seismic and EQ and whether design/procurement controls without testing are sufficient was also raised (as noted above). Finally, with respect to the program and process controls for RISC-3, pilot plant representatives expressed the view that if existing processes were not sufficient, the need to develop and implement a regulatory "third program" in some aspects, for a subset of SSC, would likely add sufficient implementation complexity and cost as to dissuade plants from undertaking Option 2.

The meeting was adjourned somewhat early because of inclement weather. In summary, the following next steps were identified: NRC to provide feedback to NEI on their draft guidelines (NEI 00-04), in the April time frame, and schedule future meetings on the topics of large late release (TBD), EQ guidelines (planned for March 22), and seismic guidelines (planned for April 5). It was further agreed that issuance of the final safety evaluation report on the South Texas exemption requests would also illuminate where resolution of certain of the technical issues involved in Option 2 may be headed.

Attachments: As stated

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