

December 20, 2002

MEMORANDUM TO: Christopher I. Grimes, Program Director
Policy and Rulemaking Programs
Division of Regulatory Improvement Programs, NRR

FROM: Eileen M. McKenna, Senior Reactor Engineer */RA/*
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SUBJECT: SUMMARY OF DECEMBER 12, 2002, MEETING WITH NUCLEAR
ENERGY INSTITUTE (NEI) AND OTHER STAKEHOLDERS ON THE
IMPLEMENTATION GUIDANCE FOR 10 CFR 50.69 (DG-1121 AND
NEI 00-04)

On December 12, 2002, Nuclear Regulatory Commission (NRC) staff met with representatives from NEI and industry at the NRC's office in Rockville, Maryland. The purpose of the meeting was for the participants to discuss the issues raised in the staff's draft regulatory guide (DG-1121) concerning use of NEI 00-04 for the purpose of implementing (draft) proposed rule 10 CFR 50.69. A list of attendees is provided in Attachment 1.

The staff began by noting that the proposed rule package is pending before the Commission in SECY-02-0176. Depending upon what action is taken, the implementing guidance would need to be adjusted accordingly. However, the staff did agree that discussing the issues about the guidance would be helpful to reach as much agreement as possible.

The first topic of discussion was common-cause failures (CCF), and how they would be considered in the categorization process. NEI stated that the industry was developing a white paper on the subject, and wished to discuss some of the rationale for it during this meeting. Attachment 2 is the handout used for this part of the discussion. The industry representative stated that they wanted to converge on a generalized approach that could be used for any application involving ranking of structures, systems, and components (SSC), with a recognition that some parts of the process may depend on the intended application, as illustrated by the Part 1 and Part 2 on the top of page 2 of the attachment. The approach involves a redefinition of the method of evaluating the risk achievement worth (RAW) of an SSC by removing the SSC and its associated CCF terms from the model, rather than setting the events representing failure modes of the SSC to TRUE. The claim was that this is adequate for the application-independent Part 1. The application-specific arguments would be made in the evaluation of the impact on risk, including the impact of the changes in CCF probabilities, in Part 2 of the process. The staff expressed reservations about the proposed approach, but agreed to give it further thought. Also discussed was the need for a basis for the factor to be used in the Part 2 evaluations for this application, which would need to either reflect an assessment of the impact of reduced treatment on the reliability of SSCs, or be related to a degradation that would be detectable through performance monitoring. There was general discussion about the difficulty in estimating the impact on reliability of relaxing special treatment requirements, and of ways that might be used to detect problems before impacts on reliability of SSC could get larger than

what was considered in the categorization process. NEI stated that as part of corrective action for a deficiency/degradation, a licensee would need to consider the potential for common-cause, and also noted the importance of the feedback process included in the proposed rule.

Other topics discussed during the meeting included the statement in the DG that the most conservative result from any of the evaluation methods must be used. NEI presented a logic chart that relates the various methods, including the PRA, and how the integrated-decisionmaking panel would use the inputs to reach a final categorization. The staff thought the approach seemed reasonable, considering the way the various methods are applied. For instance, with respect to shutdown risk assessments, the industry proposed that the primary and backup paths be identified safety-significant in the process (as compared to any path, which would tend to penalize a licensee who had identified multiple means).

There was some discussion about defense-in-depth (DID), but the industry was not ready to resolve the open issue related to use of the matrix in figure 6-1 (of NEI 00-04). With regard to this figure, it was indicated that the events listed in the table were the design basis events only because this table is being used for RISC-3 SSCs to confirm low safety-significance. There was still some confusion as to the purpose and scope of the matrix (e.g., consideration of CDF only or of design basis offsite dose limits). Concerning late containment failure, NEI noted that the guidance refers to SSC that could be beneficial in preserving long-term containment integrity. The staff questioned whether this would be too limiting, and noted that the draft RG contained another approach that could be used. The guidance to identify as safety-significant an SSC that could initiate or isolate interfacing system LOCAs was also noted.

The industry clarified the terminology used in Figure 5-1 (about preventing and mitigating core damage), indicating that prevention involves everything up to and including core damage, and mitigation involves everything after core damage, and as a result containment is a part of mitigation. The industry sought clarification about some additional items in the DG (items 10, 22, 23, 24 and 26), which was provided. In a few cases, a clarification in NEI 00-04 was identified as the means to settle the comment.

There was discussion about the extent of verification needed for PRA assumptions (as called for under (d)(1) of the rule). It was noted that in preparation of the PRA (use of standards, peer

review process) much of this would be accounted for, and maintenance rule monitoring would play a role. The categorization process could identify additional SSC that would need such monitoring.

Some of the industry representatives asked about what information needed to be included in the Statement of Considerations (SOC), asking in particular about guidance-type discussion. They thought the SOC included in the SECY contained regulatory guidance that didn't belong there. The OGC representative stated that the SOC must include the technical basis for the proposed rule, explaining how and why the Commission developed the requirements, and explain what the requirements mean. There is no legal need to include other information, such as guidance or expectations, in the SOC (they could be placed elsewhere, such as in a regulatory guide).

C. Grimes

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The participants concluded that the meeting was helpful in understanding some of the issues from the DG. Further interactions will occur following Commission action on the proposed rule package.

Attachments: As stated
PROJECT No. 689

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Attachments: As stated

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List of Attendees for 12/12/02 meeting on Implementing Guidance for 10 CFR 50.69

<u>Name</u>	<u>Organization</u>
Eileen McKenna	NRC/NRR/RPRP
Tim Reed	NRC/NRR/RPRP
Chris Grimes	NRC/NRR/RPRP
Steve West	NRC/NRR/RPRP
Geary Mizuno	NRC/OGC
Tony Pietrangelo	NEI
Adrian Heymer	NEI
Biff Bradley	NEI
Thomas Scarbrough	NRC\NRR\DE
Nancy Chapman	SERCH Bechtel
Roger Huston	Licensing Support Services
Gareth Parry	NRC/NRR/DSSA
Donnie Harrison	NRC/NRR/DSSA
Steve Dinsmore	NRC/NRR/DSSA
Gerald Sowers	PVNGS
Doug True	Erin Engineering
Jim Chapman	Scientech, Inc.
Bill Burchill	Exelon
Ellen Anderson	NEI
Glen Schinzel	STPNOC
Jason Brown	Westinghouse
Bob Lutz	Westinghouse
Thomas Hook	Dominion
Parviz Moieni	SCE
David Alford	Wolf Creek
David Fischer	NRC/NRR/DE
Dave Blanchard	Applied Reliability Engineering