

June 17, 2008

MEMORANDUM TO: Mark Cunningham, Director
Division of Risk Assessment
Office of Nuclear Reactor Regulation

FROM: Mark Rubin, Chief **/RA/**
Probabilistic Risk Assessment Licensing Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

SUBJECT: JUNE 3, 2008 PUBLIC MEETING SUMMARY - DRAFT REGULATORY
ISSUE SUMMARY – NRC STAFF POSITION ON CREDITING
MITIGATING STRATEGIES IN RISK-INFORMED LICENSING ACTIONS
AND IN THE SIGNIFICANCE DETERMINATION PROCESS

A Category 2 public meeting was held on June 3, 2008, at the Nuclear Regulatory Commission (NRC) headquarters to discuss the draft regulatory issue summary (RIS) on crediting mitigating strategies in risk-informed licensing actions and in the significance determination process. The enclosure lists the attendees. The meeting was announced on May 6, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML081230500).

The purpose of the meeting was to discuss salient portions of the subject draft RIS with members of industry and interested stakeholders to ensure clarity and promote understanding of the issue. Mark Rubin (NRC) provided a brief summary of the purpose and content of the RIS and then invited general discussion.

Biff Bradley of the Nuclear Energy Institute (NEI) noted that the RIS appeared to represent a “good effort” and could be useful in addressing issues associated with crediting mitigating strategies in risk assessments. He presented three main comments on the RIS. These comments and the resulting discussion are summarized in the following paragraphs.

Expectation that actions be proceduralized and trained upon – Mr. Bradley noted that the RIS points to the American Society of Mechanical Engineers (ASME) Probabilistic Risk Assessment (PRA) standard to establish the expectations for including actions and equipment in a PRA. He noted that the PRA standard does not require procedures or training in every case, but rather would allow crediting operator actions without procedures or training with appropriate justification. Gareth Parry (NRC) stated that the PRA standard does indeed allow credit for “skill-of-the-craft” actions. Mr. Rubin stated that the level of PRA quality required for a given regulatory application may not comport with the minimum level allowed by the standard.

Relationship of this RIS to the maintenance rule – Mr. Bradley said that, while the RIS is silent regarding the maintenance rule¹, the references to “appropriate administrative processes” and “monitoring” bring to mind maintenance rule scoping and implementation. He said that for the RIS to not mention the maintenance rule may cause confusion whenever a licensee wishes to credit mitigating strategies in a risk assessment. For example, maintenance rule paragraph

¹ Title 10 of the Code of Federal Regulations (CFR), paragraph 50.65 (10 CFR 50.65)

50.65(a)(4) is generally considered to apply to all items in a licensee's PRA model. He questioned whether adding mitigating strategies to the base PRA model would then require the licensee to include them in the (a)(4) scope. To avoid confusion, Mr. Bradley opined, the RIS should be more direct in addressing maintenance rule (a)(4).

Mr. Bradley also noted that there may be confusion with respect to maintenance rule scoping unless explicitly addressed in the RIS. The screening criteria for maintenance rule scoping includes equipment used in the emergency operating procedures (EOPs). This has been interpreted more or less broadly in practice, extending in some cases to other procedures referenced in the EOPs. Since the RIS specifies that credited mitigating strategies be in procedures, this raises the question of whether the equipment should be in the scope of the maintenance rule. He reemphasized that the "monitoring" mentioned in the RIS implies maintenance rule, as well.

Mr. Rubin said that reference to the maintenance rule may be out of place in the RIS under discussion. Mike Franovich (NRC) noted that there is existing guidance on maintenance rule that could be modified to address mitigating strategies that a licensee wishes to credit in a PRA. Andrew Howe (NRC) said that the equipment under consideration in the RIS is no different than other non-safety related equipment that may be considered for inclusion in a PRA. Steven Laur (NRC) noted that the RIS is a "permissive" one; i.e., it would allow licensees to credit mitigating strategies provided certain attributes were met. He went on to say that the RIS was intended to clarify existing NRC policy² and not to create new requirements.

The RIS should include other uses of PRA – Mr. Bradley said that the RIS mentions several regulatory guides (RGs) associated with risk-informed licensing applications, for example RG 1.174 and RG 1.178. He said the RIS should apply to other risk-informed applications, such as transition to NFPA 805³, 10 CFR 50.69⁴, various technical specification initiatives, and so forth. Mr. Rubin stated that the applications mentioned were all considered "risk-informed licensing actions" and are therefore already covered by the RIS.

The meeting was then opened for public comments and questions. Steven Dolley (Platts) asked when the NRC planned to issue the final RIS. Mr. Laur said that it could be issued as early as June, 2008, but that it could be delayed if changes were deemed necessary as a result of discussions at this meeting. Mr. Rubin noted that internal NRC discussion was still ongoing that may impact the schedule. Mr. Dolley then asked whether any licensees had requested to credit "B.5.b"⁵ actions in risk assessments. Mr. Rubin said he was not aware of any risk-informed

² Mentioned were the NRC Commission's policy statement on the use of PRA methods in nuclear regulatory activities (1995) and the Staff Requirements Memorandum entitled "Stabilizing the PRA Quality Expectations and Requirements" (2003).

³ 10 CFR 50.48(c) endorses National Fire Protection Association (NFPA) standard NFPA-805, which allows the use of performance-based methods, such as fire modeling, and risk-informed methods, such as Fire Probabilistic Risk Assessment (Fire PRA), to demonstrate compliance with the nuclear safety performance criteria.

⁴ "Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors."

⁵ On February 25, 2002, the NRC sent immediately effective orders to domestic nuclear power plant licensees regarding implementation of interim safeguards and security compensatory measures. The orders were the result of the September 11, 2001, terrorist attacks. Paragraph B.5.b of the orders involved putting in place "mitigating strategies." These are often referenced by the phrase "B.5.b" actions.

license amendments received to date that credited mitigating strategies. Mike Franovich said there had been a few cases where licensees have requested credit for mitigating strategies in the significance determination process, but consideration of these mitigating strategies did not make a difference in the NRC staff's decision in those cases. Mr. Dolley then asked whether the NRC inspections of B.5.b implementation were on track. David Nelson (NRC) replied that all are scheduled to be completed by the end of this year.

At this point, there being no further questions, comments or discussion, the meeting was adjourned.

Enclosure:
List of Attendees

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NRC-001

OFFICE:	NRR/DRA	APLA/BC
NAME:	SLaur	MRubin
DATE:	06/17/08	06/17/08

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LIST OF ATTENDEES

PUBLIC MEETING TO DISCUSS DRAFT REGULATORY ISSUE SUMMARY – NRC STAFF POSITION ON CREDITING MITIGATING STRATEGIES IN RISK- INFORMED LICENSING ACTIONS AND IN THE SIGNIFICANCE DETERMINATION PROCESS

Tuesday, June 3, 2008, 2:00 p.m. – 4:00 p.m.

**U.S. Nuclear Regulatory Commission (NRC), Conference room O-3B4
11555 Rockville Pike, One White Flint North, Rockville, Maryland 20852**

Industry and Public Attendees

Patrick Baranowsky, ERIN
James Baranski, Surry (via phone)
Barbara Baron, Westinghouse (via phone)
Biff Bradley, NEI
Nancy Chapman, Bechtel (via phone)
Frank Czysz, Susquehanna (via phone)
Brad Dolan, ERIN/PSEG (via phone)
Steven Dolley, Platts (via phone)
Thomas Gorman, Susquehanna (via phone)
Sophie Gutner, Dominion (via phone)
Paul Knoespel, NMC (via phone)
Robert Ladd, NMC (via phone)
Deepak Rao, Entergy (via phone)
Justin Wearne, PSEG (via phone)

NRC Attendees

Eric Bowman, NRR/DPR/PSPB
Mike Franovich, NRR/DRA/APOB
Melanie Galloway, NRR/DRA
Andrew Howe, NRR/DRA/APLA
Steven Laur, NRR/DRA
Dave Nelson, NRR/DPR/PSPB
Gareth Parry, NRR/DRA
Mark Rubin, NRR/DRA/APLA
Antonios Zoulis, NRR/DRA/APOB

ENCLOSURE