UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 8, 2000

MEMORANDUM TO: Cynthia A. Carpenter Chief
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

FROM: Anthony W. Markley, Project Manager
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF PUBLIC MEETING HELD ON APRIL 20, 2000 TO DISCUSS THE NEI GUIDELINE FOR CATEGORIZING AND TREATMENT OF SSCS

On April 20, 2000, the Office of Nuclear Reactor Regulation (NRR) held a public meeting with the Nuclear Energy Institute (NEI) to discuss industry efforts to develop an implementation guideline to support risk-informing the special treatment requirements of 10 CFR Part 50 (RIP-50) and industry initiatives to support the rulemaking. Representatives of the Office of Nuclear Regulatory Research, the American Society of Mechanical Engineers, a number of reactor licensees, consultants, and other stakeholders also attended and participated in the meeting. Attachment 1 lists meeting participants. Attachment 2 contains the staff's slides that identified preliminary comments on the NEI draft partial guideline for risk-informed categorization of structures, systems, and components. Attachment 3 contains the slides that provided the NEI view of the preliminary draft guideline and its use. Attachment 4 provides a set of comments and plans presented by American Society of Mechanical Engineers.

The staff provided NEI with its preliminary views on the partial draft of the industry implementation guideline that had been provided to the staff at the March 30, 2000 public meeting. The staff emphasized that its views and the ensuing discussions were associated with the draft guideline, were intended to stimulate discussion, do not represent final NRC positions and are not negotiations of rulemaking language. The staff had specific comments in the areas of PRA scope, quality, and the use of importance measures, the handling of external events, low power and shutdown modes, defense-in-depth, treatment of low safety-significant SSCs within current special treatment scope, integrated decision panel, and feedback and monitoring.

In the NEI presentation, NEI indicated that it had added "important to safety" SSCs to the safety-related category (i.e., RISC-1 Box) and proposed that they may want to address certain rules such as 50.36, 50.59, and 10 CFR Part 21 separately from the main effort to risk-informed special treatment requirements. NEI then discussed the draft guideline including its proposed approach for categorizing and applying treatment to the various RISC categories. A general discussion of RISC classification and appropriate treatment followed. NEI indicated that the guideline would require additional work based on staff input provided at this meeting. NEI estimated that it would provide a final draft guideline by the end of May 2000.

NEI also discussed its efforts to solicit pilot plants. The Boiling Water Reactor Owners Group (BWROG) representative indicated that technical approval has been obtained with final approval expected on May 15, 2000. If approved, work would proceed immediately. The Westinghouse Owners Group (WOG) indicated that it is tracking approximately one month behind the BWROG. Westinghouse anticipates approval of its efforts in the June 2000 time frame. The Combustion Engineering Owners Group (CEOG) indicated that it, too, was moving ahead and expected approval of its participation in pilot activities in the June 2000 time frame.

The ASME representative indicated that ASME could assist in the risk-informing efforts currently underway. ASME plans to be involved in the classification/categorization effort with the intent of developing a code case for subsequent approval in the mid 2001 time frame.

The staff and NEI agreed to continue to hold regular meetings. The next meeting will be scheduled for early June 2000.

Attachments: as stated

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JSchiffgens
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List of Attendees

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B. Christie	Performance Technology	865-588-1444
P. Balmain	NRC	301-415-3697
G. Miller	Virginia Power	804-273-2271
M. Cheok	NRC	301-415-8380
A. Markley	NRC	301-415-3165
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F. Akstulewicz	NRC	301-415-1136
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R. Palla	NRC	301-415-1095
P. Moicni	SCE/SONGS	949-368-9349
J. Williams	NRC	301-415-1470
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K. Heck	NRC	301-415-2682
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G. Schinzel	STPNOC	361-972-7854
C. Willbanks	NUS Info Services	301-258-1865
G. Bagchi	NRC	301-415-3305
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W. Norris	NRC	301-415-6796
M. Shuaibi	NRC	301-415-2859
R. Barrett	NRC	301-415-3183
G. Holahan	NRC	301-415-2884
J. Calvo	NRC	301-415-2774
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Attachment 1

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Draft NEI Guideline

NRC Staff Preliminary Comments
April 20, 2000

Attachment 2

Purpose

- Preliminary review of draft guideline provided at March 30, 2000 meeting
- Comments are "high-level," intended to stimulate discussion
- Comments do not represent final NRC positions
- Staff will conduct thorough review after receipt of the full draft guideline

Topics

- PRA Scope and Quality
  - PRA should reflect the as-built, as-operated facility
  - Quality standards
- Handling of external events, and low power and shutdown modes
  - Importance rankings
  - Effect on screening analysis
- Defense-in-depth
- Treatment of low safety-significant SSCs within current special treatment scope

Topics, continued

- Integrated Decisionmaking Panel
  - Qualifications
  - Definition of process
- Importance measures
  - Usage of generic values for FV and RAW
  - Sensitivity analyses
  - Risk quantification
- Feedback and monitoring

Risk-Informed Regulation Treatment of RISC SSCs

April 20, 2000

Attachment 3

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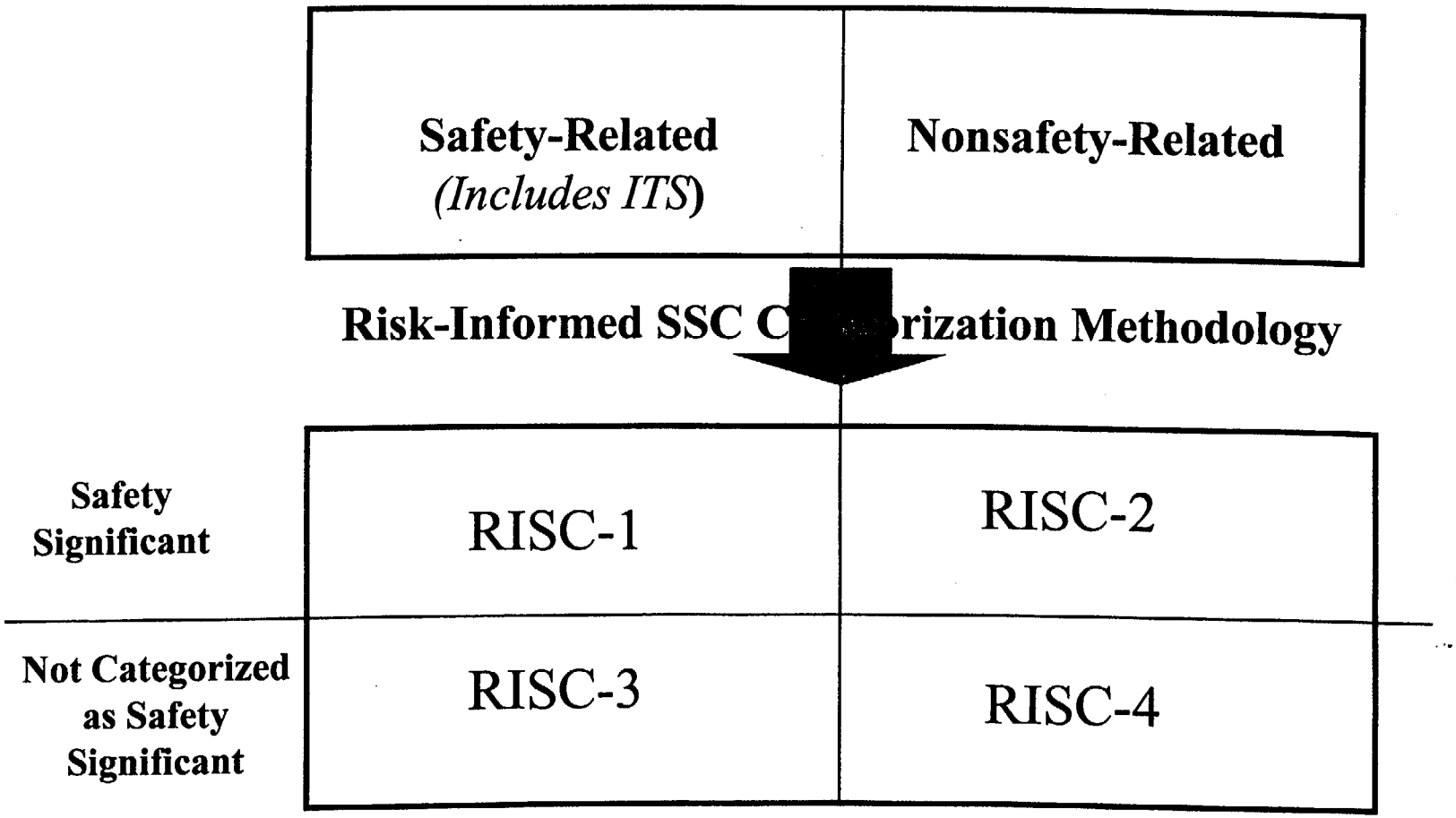
Risk-Informed Categorization



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Risk-Informed SSC Categories

Safety-Related **(includes ITS)**	Nonsafety-Related
1 ***RISC-1*** ***As per existing requirements*** (Safety-Significant)	2 ***RISC-2*** *Subject to Maintenance rule* ***& commercial programs**** (Safety-Significant, Nonsafety-Related)
3 ***RISC-3*** Credited in specific regulations ***Maintain functions required by specific regulations*** **(Commercial Programs*)**	4 ***RISC-4*** **Not in Regulatory Scope** **(Commercial Programs*)**

*Commercial programs are sometimes known as BOP programs

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Risk-Informed Safety Category - 1

Existing Safety-Related, Safety-Significant SSCs (includes Important-to-Safety (ITS) SSCs)

- ***Existing safety-related SSCs & safety-related attributes/functions***
  - No change, as per existing safety-related/ITS requirements
- ***Existing safety-related SSCs & new attributes/functions***
- For beyond design basis events
  - Consideration in plant programs such as design, testing, etc., to provide reasonable assurance of operation to satisfy assumptions in the risk-evaluation methodology

Risk-Informed Safety Category - 2

Existing Nonsafety-Related, Safety-Significant SSCs

- *Subject to the maintenance rule, including its corrective action element, §50.65(a)(1)*
- *Assumptions and conclusions relating to the functions and attributes of the risk-informed SSC evaluation satisfied*
- *Reasonable commercial assurance standard -- commercial practices*
- *For beyond design bases events: consideration in plant programs such as design, testing, etc., to provide reasonable assurance of operation to satisfy assumptions in the risk-evaluation methodology*
- *Under Option 2, reporting requirements of §50.72 & §50.73 are not applicable*

Risk-Informed Safety Category - 3

Existing Safety-Related/ITS SSCs Categorized as Not Being Safety-Significant

- *Monitoring or commercial controls and procedures*
- *Licensee established performance thresholds* are sufficient for monitoring, (system/train level)*
- *Reasonable commercial assurance standard to satisfy the assumptions in the applicable regulations*
- *Reasonable assurance of environmental or seismic considerations based on commercial practices, e.g., vendor certification, design, testing or analyses, etc.*
- *Not subject to NRC reporting requirements*
- *Existing licensing commitments superceded by a commitment to monitor or adopt commercial controls*

NOTE: RISC-3 SSCs not required by regulation may be moved to RISC-4 via §50.59

*May be similar to Maintenance Rule Criteria

Risk-Informed Safety Category - 4 Previously nonsafety-related SSCs

- SSCs categorized as not being safety-significant and are not safety-related or ITS SSCs
- Not subject to NRC regulations
- Subject to new NRC oversight process
- Licensing commitments not applicable

Risk Informed Part 50
ASME Section XI
Repairs Replacements Modifications (RRM)

Important Note: ASME uses a consensus process, therefore none of the following thoughts represent current ASME endorsed proposals.

Based on informal discussions amongst the SC XI and BNCS leadership, we believe that we can bring valuable information into the Risk Informed Part 50 effort. In fact, if formally approved by ASME, we can develop the mechanism to implement proposed rulemaking affecting special treatment for ASME Code items.

SGRRM has opened an action item for this issue and will be developing a plan which will be presented to the SC XI Executive Committee on 5/16/00. This plan will be presented to the BNCS and the CC&S for their approval on the scope and direction to be pursued by SCXI.

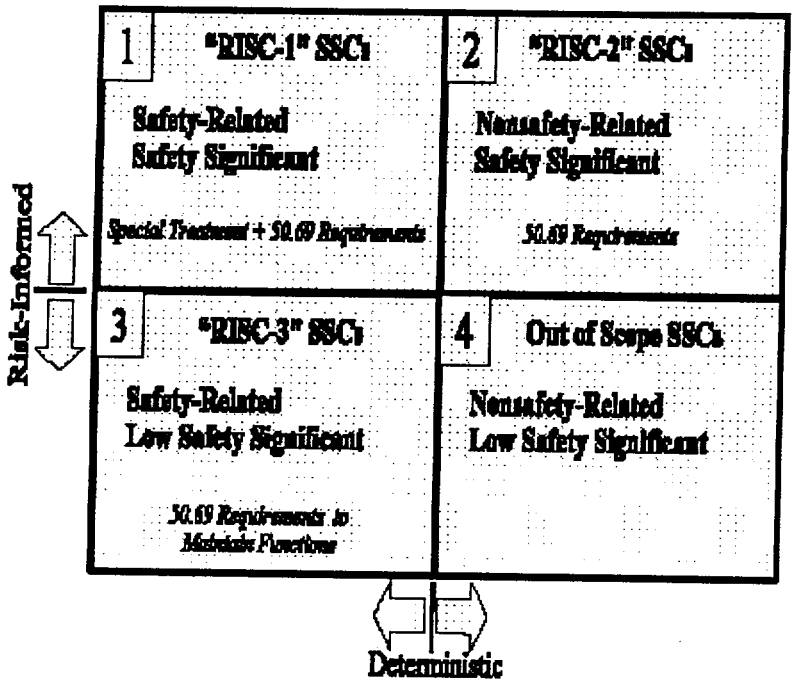
This is an excellent opportunity for ASME, NRC and NEI to team together to produce a change that will maintain plant safety while at the same time reduce cost.

There are two different scenarios for pursuing this action in SCXI for RRM activities:

- Develop both the requirements for how to perform the risk informed analysis (models of this are present in Code Cases N577, N578 and N560-1 for ISI) and the specific Code rules to apply for RISC-1 through RISC-4 scope items.
- Continue with the historical approach that the Code has used since the development of Sections III and XI. Rules for classifying items as RISC-1 through RISC-4 would not be contained within the Code. Currently rules for classifying items as Class 1 through 3 are contained within 10CFR 50.55a and Regulatory Guide 1.26. The Owner is responsible for developing the classification outside of the framework of the Code. The Code will develop appropriate requirements in relation to the item's RISC classification.

In relation to RRM activities, if BNCS provides concurrence to proceed with this action, the rules would in all likelihood would be published as a Code Case. A model is available in N-544, Repair Replacement of Small Items. Code Case N-544 was an implementing Code Case dealing with alternative repair and replacement requirements for small items. In essence, N-544 allows exemption from: Certificate of Authorization, NCA-3800 and AIA involvement for replacement items, Repair/Replacement Plan administrative requirements, pressure testing, ANII and completion of Form NIS-2 based on a size exemption for Class 2 and 3; and make-up capacity and break size for Class 1.

Using these principles, an RRM Code Case could be developed that would invoke the same exemptions and extend them to simply ensure functionality (i.e., QA would be removed) for RISC-3 items. RISC-4 items would be exempt from all Code requirements. RISC-2 requirements are being discussed.



. Issues that need to be addressed by SCXI:

- Schedule: The consensus review process mandates a number of committee reviews, Working Group development, Subgroup, SCXI, B&PV Code , BCA and BNCS. Although more than one committee level can review an item in one set of meetings, an expedited approval process will be needed. What are the schedule needs for the RI-Part 50 effort?.
- SCXI will need to closely team with the NRC and NEI as requirements are developed for how to classify the items.
- Should RISC-2 items be in the Code Case scope?
- What requirements should be applied to RISC-3 items to ensure functionality and be comparable to "commercial practices".
- The Code Case will have to be adopted by the NRC in Regulatory Guide 1.147 or in the new regulations.

William C Holston
Chairman SubGroup Repairs Replacements & Modifications
April 20, 2000

ASME Terminology Key:

B&PV – Boiler & Pressure Vessel
CC&S – Council on Codes & Standards
SC XI – Subcommittee Section XI
MC – Main Committee
BNCS – Board on Nuclear Codes & Standards
BCA – Board on Conformity Assessment
SGRRM – Subgroup Repairs Replacement Modifications