



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

October 7, 2004

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM:      SECY-04-0109

TITLE:                      FINAL RULEMAKING TO ADD NEW SECTION  
10 CFR 50.69, "RISK-INFORMED  
CATEGORIZATION AND TREATMENT OF  
STRUCTURES, SYSTEMS, AND COMPONENTS  
FOR NUCLEAR POWER REACTORS"

The Commission (with Chairman Diaz and Commissioner Merrifield agreeing) approved the final rule as noted in an Affirmation Session and recorded in the Staff Requirements Memorandum (SRM) of October 7, 2004. Commissioner McGaffigan disapproved the final rule.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

  
Annette L. Vietti-Cook  
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc:      Chairman Diaz  
         Commissioner McGaffigan  
         Commissioner Merrifield  
         OGC  
         EDO  
         PDR

VOTING SUMMARY - SECY-04-0109

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. DIAZ	X				X	7/29/04
COMR. McGAFFIGAN		X			X	9/28/04
COMR. MERRIFIELD	X				X	7/29/04

COMMENT RESOLUTION

In their vote sheets, Chairman Diaz and Commissioner Merrifield approved the final rule as noted in an Affirmation Session and recorded in the Staff Requirements Memorandum (SRM) of October 7, 2004. Commissioner McGaffigan disapproved the final rule.

**AFFIRMATION ITEM**

**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary  
FROM: CHAIRMAN DIAZ  
SUBJECT: SECY-04-0109 - FINAL RULEMAKING TO ADD NEW SECTION 10 CFR 50.69, "RISK-INFORMED CATEGORIZATION AND TREATMENT OF STRUCTURES, SYSTEMS, AND COMPONENTS FOR NUCLEAR POWER REACTORS"

Approved XX *(handwritten initials)* Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

See attached comments.

*(handwritten signature)*  
SIGNATURE

July 29, 01  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

04 JUL 29 PM 2:28

04 JUL 29 PM 2:28

## Chairman Diaz's Comments on SECY-04-0109

The development a new risk-informed categorization and treatment process for reactor systems, structures and components (SSCs) is one of the most challenging and promising regulatory activities being undertaken by the Commission. The numerous difficult policy and operational issues have required significant effort to resolve. I would like to thank the staff for working so hard to make the vision of a risk-informed categorization and treatment process a reality. It is clear that there are strong and deeply held views on many of the important and difficult issues. I am pleased that these issues have been raised and thoroughly discussed. I would also like to specifically thank the staff members who raised differing views and made sure that their views were heard. I believe that the final product is better after having addressed these issues. It is important that the staff is capable and willing to raise differing views, and our management should be commended for creating an environment were different views are not only accepted but appreciated as contributing to better regulation.

One of the key bases of the effort to develop a risk-informed categorization and treatment process for reactor SSCs was that the regulation be performance-based. This objective was articulated in some of the earliest discussions of risk-informed regulation, including SECY-98-300, "Options For Risk-Informed Revisions to 10 CFR Part 50 - 'Domestic Licensing of Production and Utilization Facilities.'" Significant progress has been made in the advancement of performance-based regulation. For example, Commission policy was developed in the Staff Requirements Memoranda for SECY-98-144, "White Paper on Risk-informed And Performance-based Regulation," and more recently additional guidance has been developed. Although we have made progress, I believe that more progress could have been made, and that performance-based approaches should be used more extensively.

In this regard, the staff proposal in SECY-04-0109, "Final Rulemaking to Add New Section 10 CFR 50.69, 'Risk-Informed Categorization and Treatment of Structures, Systems and Components,'" does have performance-based elements, however, I am concerned that other aspects of the rule are overly prescriptive when they should also be performance-based. The final rulemaking proposal contained in SECY-04-0109 is unnecessarily more prescriptive than the proposed rulemaking contained in SECY-02-0176, "Proposed Rulemaking to Add New Section 10 CFR 50.69 'Risk-Informed Categorization and Treatment of Structures, Systems and Components.'" Therefore, treatment of low safety significant SSCs should be accomplished through general quality requirements (e.g., inspection and testing; and corrective action) that address key elements of SSC functionality while giving licensees the capability to implement what they have determined is needed, commensurate to the low safety significance of the SSCs. The staff proposal goes well beyond general quality requirements and limits discretion for flexibility in the means of implementation.

The proposed treatment for low safety significant SSCs in the risk-informed safety class 3 (RISC-3) appears to go well beyond that for safety significant SSCs in RISC-2. This is not consistent with the original intent of this effort nor is it consistent with my views on the direction that our regulatory program should take. I commented on the disparity of the treatment between low safety significant and safety significant SSCs in my vote for the proposed rule. That vote included the following statement -

"Much attention has been focused on the *reduced* treatment of the safety-related, low safety significant (RISC-3) SSCs in the proposed rule. I believe that not enough consideration has been given to the positive effect on safety by the *increased* emphasis

on the safety significant SSCs under the proposed rule. The proposed rule should enable the NRC and licensees to focus resources on SSCs that make a significant contribution to plant safety by restructuring the regulations to allow an alternative risk-informed approach to special treatment thereby *improving the safety* of the nuclear power plants. The increased emphasis on both RISC-1 and RISC-2 SSCs constitutes a significant safety improvement."

I continue to believe that too much attention is being placed on SSCs with low safety significance. Due consideration should be given to the importance of state-of-the-art capabilities in manufacturing and procurement specifications for industrial-grade components with appropriate quality for this use. In an integral approach, traditional engineering technology and risk assessment technology are not in conflict. They are complimentary and supportive efforts in an integrated approach to achieve a more complete level of performance assessment. I do not support treatment requirements for low safety significant SSCs that are more prescriptive than the treatment requirements for risk significant SSCs; they should be less. The rule language needs to be modified to reduce the prescriptive nature of the treatment requirements associated with low safety significant SSCs.

As a result, I approve the staff recommendations contained in SECY-04-0109 with the following modifications.

- 10 CFR 50.69(d)(2) should be rewritten as follows -

(2) *RISC-3 SSCs*. The licensee or applicant shall ensure that RISC-3 SSCs remain capable of performing their safety-related functions under design basis conditions, including environmental conditions and effects and seismic conditions, throughout their service life. The treatment of RISC-3 SSCs must also be consistent with the categorization process. Inspection and testing; and corrective action shall be provided for RISC-3 SSCs.

(i) *Inspection and Testing*. Periodic inspection and testing activities must be conducted to determine that RISC-3 SSCs will remain capable of performing their safety-related functions under design basis conditions; and

(ii) *Corrective Action*. Conditions that would prevent a RISC-3 SSC from performing its safety-related functions under design basis conditions must be corrected in a timely manner. For significant conditions adverse to quality, measures must be taken to provide reasonable confidence that the cause of the condition is determined and corrective action taken to preclude repetition.

- The rulemaking package, including *Federal Register* Notice and public comment responses, should be modified to reflect these changes.



**AFFIRMATION ITEM**

**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER MCGAFFIGAN

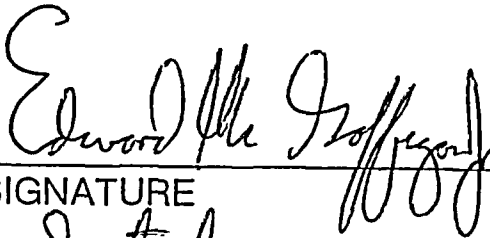
SUBJECT: SECY-04-0109 - FINAL RULEMAKING TO ADD NEW SECTION 10 CFR 50.69, "RISK-INFORMED CATEGORIZATION AND TREATMENT OF STRUCTURES, SYSTEMS, AND COMPONENTS FOR NUCLEAR POWER REACTORS"

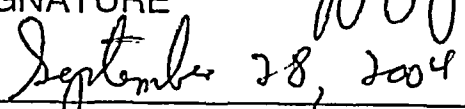
Approved \_\_\_\_\_ Disapproved  Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

**COMMENTS:**

See attached comments.

  
\_\_\_\_\_  
SIGNATURE

  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

Commissioner McGaffigan's Comments on SECY-04-0109

I do not agree with my colleagues on their revision to the treatment requirements for RISC-3 SSCs at 10 CFR 50.69 (d)(2). The staff's language in the final rule is identical to that in the proposed rule, except for the addition of the corrective action clause. I support the staff's language.

We certainly received comments that the proposed rule's treatment requirements for RISC-3 SSCs were too onerous, and my colleagues have a legal basis for this change. However, it would have made for a better record in this rulemaking to have solicited specific comment on this change (which would not have had majority Commission support at the time of the proposed rule) just as comment was solicited on my language that would have imposed more stringent requirements on PRA quality (which also did not have majority Commission support at the time of the proposed rule, or today).

With regard to PRA quality, I agree that there are incentives built into this rule and its companion guidance for licensees to produce higher quality PRAs. The PRA provisions may be adequate for this rulemaking, but I do not believe that we are on a path that will produce PRAs of the quality needed for the more complex 10 CFR 50.46 rulemaking (as I will make clear in a vote on a separate paper).

I note that some industry stakeholders have expressed significant concern about the categorization process in the final rule. I also note that many on the staff are concerned about the Chairman's changes to the RISC-3 treatment requirements.

Because I felt that there was still hope of reconciling these various concerns on treatment, categorization and PRA quality, I would have liked to have followed a process similar to those the Commission followed in amending 10 CFR 50.59 and 10 CFR 50.65 and 10 CFR Parts 70 and 35 earlier in my tenure on the Commission, namely holding a public meeting on this final rule that would have aired all the issues with follow-up meetings between the staff and stakeholders in an attempt to find compromises. That approach was rejected.

The rules that I just cited were mandatory rules. 10 CFR 50.69 is a voluntary rule, but consensus is no less important because the risk that the Commission majority faces now is that the significant resources that the Agency and so many of our internal and external stakeholders have expended in this effort may have yielded a voluntary rule that will not be used. I sense regulatory instability going forward, and I suspect that the potential voluntary users of this rule will sense it as well.

I am checking the "disapprove" box on the cover sheet of this vote, although I believe that I am closer to the staff position than my colleagues who checked the "approve" box. I do so to distinguish my position from my colleagues in the voting record. I disapprove the final rule that will emerge from this voting process for the substantive and procedural reasons discussed above.



**AFFIRMATION ITEM**

**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MERRIFIELD  
SUBJECT: SECY-04-0109 - FINAL RULEMAKING TO ADD NEW SECTION 10 CFR 50.69, "RISK-INFORMED CATEGORIZATION AND TREATMENT OF STRUCTURES, SYSTEMS, AND COMPONENTS FOR NUCLEAR POWER REACTORS"

Approved  Disapproved  Abstain

Not Participating

COMMENTS:

I concur in the well written vote  
of Chairman Diaz.

  
SIGNATURE

7/25/04  
DATE

Entered on "STARS" Yes  No