



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

September 21, 2005

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-05-0138

TITLE: RISK-INFORMED AND PERFORMANCE-BASED ALTERNATIVES  
TO THE SINGLE-FAILURE CRITERION

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of September 21, 2005.

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

A handwritten signature in black ink, appearing to read "Annette L. Vietti-Cook".

Annette L. Vietti-Cook  
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Diaz  
Commissioner Merrifield  
Commissioner Jaczko  
Commissioner Lyons  
OGC  
EDO  
PDR

VOTING SUMMARY - SECY-05-0138

RECORDED VOTES

|                  | APRVD | DISAPRVD | ABSTAIN | NOT<br>PARTICIP | COMMENTS | DATE    |
|------------------|-------|----------|---------|-----------------|----------|---------|
| CHRM. DIAZ       | X     |          |         |                 | X        | 8/26/05 |
| COMR. MERRIFIELD | X     |          |         |                 | X        | 9/7/05  |
| COMR. JACZKO     | X     |          |         |                 | X        | 9/14/05 |
| COMR. LYONS      | X     |          |         |                 | X        | 8/31/05 |

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on September 21, 2005.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: CHAIRMAN DIAZ

SUBJECT: **SECY-05-0138 - RISK-INFORMED AND  
PERFORMANCE-BASED ALTERNATIVES TO  
THE SINGLE-FAILURE CRITERION**

Approved xx <sup>w/comments</sup> 1/1 Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_  
Not Participating \_\_\_\_\_

COMMENTS:

See attached comments.

liis Diaz  
SIGNATURE

Aug 26, 05  
DATE

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

Chairman Diaz' Comments on SECY-05-0138

The staff states, based on the study, that it is premature to choose alternatives to risk inform the single failure criterion. Additionally, the staff recommends subjecting the single failure criterion technical report to public comment and including future efforts to risk-inform the single failure criterion in the larger effort to risk-inform 10 CFR Part 50. Although the study presents useful information, it is disappointing that after almost two and one-half years, "implementation, feasibility, resources and costs," were not considered. In the absence of such information I agree that the study is not suitable for regulatory decision-making. It is clear that this effort should be integrated with other risk-informed efforts and be subject to the formal process involved with rulemaking.

Therefore, I approve the staff recommendations in SECY-05-0138 and concurrently the staff should take the following action:

Activities to risk-inform the single failure criterion should be combined with the efforts to risk-inform 10 CFR Part 50, and the technology-neutral risk-informed framework and be incorporated expeditiously into the rulemaking process through the development of an Advanced Notice of Proposed Rulemaking (ANPR). This will assure that our efforts to risk-inform the reactor regulations are undertaken in an open, transparent, and integrated manner.

A handwritten signature in black ink, appearing to be "L. Diaz", is written below the text of the action item.

NOTATION VOTE  
RESPONSE SHEET

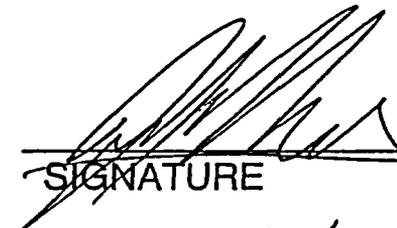
TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MERRIFIELD  
SUBJECT: **SECY-05-0138 - RISK-INFORMED AND  
PERFORMANCE-BASED ALTERNATIVES TO  
THE SINGLE-FAILURE CRITERION**

Approved  Disapproved  Abstain

Not Participating

COMMENTS:

*See attached comments.*

  
\_\_\_\_\_  
SIGNATURE  
  
\_\_\_\_\_  
DATE *9/2/05*

Entered on "STARS" Yes  No

Commissioner Merrifield's Comments on SECY-05-0138

I approve the staff's recommendations to issue for public comment the draft technical report on broader changes to the single failure criterion. I also agree that further work on this issue should be incorporated into the formal program plan to make risk-informed and performance-based revisions to Part 50, as directed by the Commission in the May 9, 2005 SRM from the Office of Regulatory Research Program Commission briefing. The staff has done a good job up to now of demonstrating that risk-informing the regulations is possible, as evidenced by several final rules that have been issued, as well as the ongoing effort to risk-inform the emergency core cooling criteria in 10 CFR 50.46. Now, the time for risk-informing our regulations in a piece meal way is drawing to a close, and I look forward to seeing the staff's planned schedule to risk-inform Part 50, develop alternatives to the single failure criterion, and the technology-neutral framework for new plant licensing into one formal integrated program.



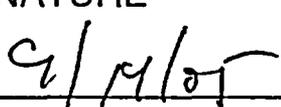
9/2/05

NOTATION VOTE  
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER JAZZKO  
SUBJECT: **SECY-05-0138 - RISK-INFORMED AND  
PERFORMANCE-BASED ALTERNATIVES TO  
THE SINGLE-FAILURE CRITERION**

Approved  Disapproved  Abstain   
Not Participating

COMMENTS: See attached comments.

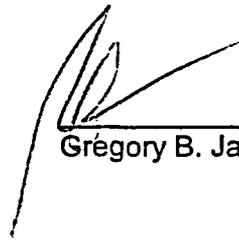
  
\_\_\_\_\_  
SIGNATURE  
  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No

**Commissioner Jaczko's Comments on SECY-05-0138  
Risk-Informed and Performance-Based Alternatives to the Single-failure Criterion**

I approve the staff's request to issue the draft report for public comment. I commend the staff for recognizing that stakeholder involvement may result in alternatives not yet considered and improve the overall product. I also approve including any follow-up action on this activity into the effort directed in SRM M050405 of May 9, 2005 to develop a formal program plan to make risk-informed and performance-based revisions to 10 CFR Part 50, including revisions to the applicable Regulatory Guides, Standard Review Plans, or other guidance documents. I did not support the direction to risk-inform Part 50 that was provided in the May 9, SRM. Since the majority of the Commission supports moving forward with risk-informing Part 50, it should be done in an open, transparent manner that integrates this initiative and the technology neutral framework initiative.

As I have stated in my vote on SECY-05-0052 (Emergency Core Cooling System rule), I am supportive of the NRC's Probabilistic Risk Assessment (PRA) Policy Statement. It clearly states that PRA shall be used in a manner that complements the NRC's deterministic approach and supports the NRC's traditional defense-in-depth philosophy. Until the agency clearly articulates or establishes the ground rules for how PRA initiatives will compliment and support our traditional approaches to regulation, it will be difficult to risk-inform Part 50 any more than it has been.

 7/14/05  
\_\_\_\_\_  
Gregory B. Jaczko      Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER LYONS  
SUBJECT: **SECY-05-0138 - RISK-INFORMED AND  
PERFORMANCE-BASED ALTERNATIVES TO  
THE SINGLE-FAILURE CRITERION**

Approved <sup>w/ comments</sup>  \_\_\_\_\_ Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

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

COMMENTS:

  
\_\_\_\_\_  
SIGNATURE  
8/3/05  
\_\_\_\_\_  
DATE

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

## Commissioner Lyons' Comments on SECY-05-0138

I approve the staff recommendations in SECY-05-0138 and consistent with my vote on SECY-05-0130 request the staff to incorporate the single-failure criterion effort into an over-arching technology-neutral licensing framework initiative within the Advanced Notice of Proposed Rulemaking (ANPR) process. I will reiterate that I envision such a framework to be highly coherent and internally consistent, rational, and clearly understandable and open to the maximum extent possible, in a manner that unifies probabilistic and deterministic methods to maximize the strengths of each.

  
8/31/05