



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

SECRETARY

September 10, 2007

COMMISSION VOTING RECORD

DECISION ITEM: SECY-07-0101

TITLE: STAFF RECOMMENDATIONS REGARDING A
RISK-INFORMED AND PERFORMANCE-BASED REVISION
TO 10 CFR PART 50 (RIN 3150-AH81)

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of September 10, 2007.

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", written over a horizontal line.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Klein
Commissioner Jaczko
Commissioner Lyons
OGC
EDO
PDR

VOTING SUMMARY - SECY-07-0101

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. KLEIN	X				X	8/9/07
COMR. JACZKO	X				X	8/13/07
COMR. LYONS	X				X	8/17/07

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 10, 2007.

Commissioner Comments on SECY-07-0101

Chairman Klein

I approve the staff's recommendation to defer rulemaking for risk-informed and performance-based 10 CFR Part 50 reactor requirements for advanced reactors until after the development of the licensing strategy for the Next Generation Nuclear Plant (NGNP), or receipt of an application for a Pebble Bed Modulator Reactor (PBMR) design certification or combined license. Although I favor the concept of developing risk-informed performance-based requirements for future reactors, I agree with the staff that until there is a demonstrable need for conducting rulemaking to support licensing of non-light water advanced reactors, the decision to do so would be premature. All near-term combined license applications are expected to reference light water reactors and they can be licensed using the recently revised Part 52 rule. Nonetheless, the insights that would be gained through the evaluation of the various options being considered in the licensing strategy for the NGNP and the PBMR pre-application review should help determine if and when the Part 50 rulemaking should proceed.

The staff's work on the technology neutral framework as an approach for developing a risk-informed performance-based technical basis for licensing advanced reactors, including a risk-informed approach to address single failure criterion, is one such option. The framework's concept is appealing, but I agree with the recommendation by the Advisory Committee on Reactor Safeguards that this concept should be tested on an actual design. The PBMR design certification review would be a logical choice to test this approach. Since the PBMR probabilistic risk assessment is expected to be available during the licensing process, the staff should take the opportunity to use the framework concepts to review the PBMR design.

With respect to consideration for rulemaking to risk-inform individual Part 50 requirements, I agree that the staff should not undertake a new revision effort until specific rules are identified as needed. This includes any effort to risk-inform the single failure criterion in Part 50. This will allow the staff and the industry to focus resources on maintaining the safety of existing reactors and on the licensing of new reactors on the horizon to existing requirements. The staff, however, should maintain its focus in completing the current effort to risk-inform specific rules such as §50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors," and §50.61, "Fracture Toughness Requirements for Protection Against Pressurized Thermal Shock Events."

For the policy issues that need to be resolved to develop a licensing strategy for advanced reactors, I acknowledge that there are wide-ranging opinions among the various stakeholders on the issues of integrating safety, security, and emergency preparedness, establishing a minimum level of safety for new plants, integrating risk for a site with multiple reactors, and establishing containment performance standards. I agree with the staff that there is no compelling reason to seek generic resolution of these policy issues at this time since all near-term combined license applications will be for light water reactors and these can be licensed using the existing regulations. For non-light water reactors, the insights that would be gained through the evaluation of the various options being considered in the licensing strategy for the NGNP and the PBMR pre-application review should help reconcile the diverse stakeholder opinions for generically resolving this policy issue.

Lastly, I agree that a Commission policy statement that defines defense-in-depth is needed for

future plants. A technology-neutral defense-in-depth statement that recognizes the role of inherent safety and passive approaches, in addition to the traditional use of redundant and diverse active systems, would be helpful in advance of developing new licensing requirements. Therefore, I approve staff's recommendation to develop a draft policy statement on defense-in-depth for future plants in a timely fashion so that it could be evaluated using the insights gained through the development of the NGNP licensing strategy and completion of the PBMR pre-application review.

The use of the Advanced Notice of Proposed Rulemaking has yielded valuable feedback from the stakeholders in shaping the staff's vision for developing a licensing strategy for future reactors. I strongly support the staff's continued interaction with the ACRS and external stakeholders in this important pioneering work.

Commissioner Jaczko

I approve the staff recommendation to defer work on the rulemaking for risk-informed and performance-based 10 CFT Part 50 reactor requirements for advanced reactors until after the development of the licensing strategy for the Next Generation Nuclear Plant. As I indicated in my vote disapproving the staff recommendation in SECY-06-0007, the paper from which the Commission decided to issue the advanced notice of proposed rulemaking, the efforts to develop a technology neutral reactor rulemaking would not be the most efficient use of agency resources and would not likely be of use to any of the technologies likely to be used by a utility to seek a license in the near future. As the staff recommends in the current paper, the agency should develop the licensing strategy for a particular technology chosen for the NGNP project and then consider the need for a technology neutral, risk-informed, performance-based rulemaking. I fully support focusing the staff resources in this manner at this time.

I am particularly pleased with the staff and stakeholder comments regarding the importance of developing a policy statement on the defense-in-depth policy separate from the development of technology neutral reactor regulations. I encourage the staff to engage many members of the public, the Congress, the industry and other stakeholders as they prepare this important document.

Commissioner Lyons

I approve the staff's recommendation to defer rulemaking for risk-informed and performance-based 10 CFR Part 50 reactor requirements for advanced reactors until after the development of the licensing strategy for the Next Generation Nuclear Plant (NGNP). The staff should provide a recommendation regarding rulemaking to the Commission 6 months after the NGNP licensing strategy is finalized. While this remains a valuable initiative, I agree with the Chairman and the staff that until there is a demonstrable need for conducting rulemaking to support licensing of non-light water advanced reactors, the decision to do so would be premature. This does not alter my commitment to supporting non-light water reactor research activities, which should continue.

I believe the ANPR has been very useful in soliciting stakeholder views on a number of issues. In some areas, such as use of the Quantitative Health Objectives to establish the minimum level of safety for new plants, there was a strong consensus. In other areas, there were more

divergent views. Further development of the rule should await the benefit of the licensing strategy for the NGNP as well as staff engagement on licensing of the pebble bed modular reactor (PBMR). I also join the Chairman and the ACRS in supporting the testing of the Framework concept on an actual design. Finally, I continue to strongly believe that safety, security, and emergency preparedness should be integrated in developing a risk-informed/performance-based set of requirements. Stakeholders have raised legitimate concerns and challenges with this approach, however, as this effort moves forward, it is important that the NRC seek to develop a holistic approach to safety.

In the interim, the staff should publish the Framework and initiate efforts to develop a policy statement on defense-in-depth.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: CHAIRMAN KLEIN

SUBJECT: SECY-07-0101 - STAFF RECOMMENDATIONS
REGARDING A RISK-INFORMED AND
PERFORMANCE-BASED REVISION TO 10 CFR PART
50 (RIN 3150-AH81)

Approved Disapproved Abstain

Not Participating

COMMENTS: Below Attached None

See attached comments.



SIGNATURE

8/9/07

DATE

Chairman Klein's Comments on SECY-07-0101

I approve the staff's recommendation to defer rulemaking for risk-informed and performance-based 10 CFR Part 50 reactor requirements for advanced reactors until after the development of the licensing strategy for the Next Generation Nuclear Plant (NGNP), or receipt of an application for a Pebble Bed Modulator Reactor (PBMR) design certification or combined license. Although I favor the concept of developing risk-informed performance-based requirements for future reactors, I agree with the staff that until there is a demonstrable need for conducting rulemaking to support licensing of non-light water advanced reactors, the decision to do so would be premature. All near-term combined license applications are expected to reference light water reactors and they can be licensed using the recently revised Part 52 rule. Nonetheless, the insights that would be gained through the evaluation of the various options being considered in the licensing strategy for the NGNP and the PBMR pre-application review should help determine if and when the Part 50 rulemaking should proceed.

The staff's work on the technology neutral framework as an approach for developing a risk-informed performance-based technical basis for licensing advanced reactors, including a risk-informed approach to address single failure criterion, is one such option. The framework's concept is appealing, but I agree with the recommendation by the Advisory Committee on Reactor Safeguards that this concept should be tested on an actual design. The PBMR design certification review would be a logical choice to test this approach. Since the PBMR probabilistic risk assessment is expected to be available during the licensing process, the staff should take the opportunity to use the framework concepts to review the PBMR design.

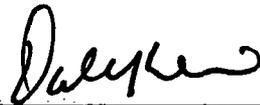
With respect to consideration for rulemaking to risk-inform individual Part 50 requirements, I agree that the staff should not undertake a new revision effort until specific rules are identified as needed. This includes any effort to risk-inform the single failure criterion in Part 50. This will allow the staff and the industry to focus resources on maintaining the safety of existing reactors and on the licensing of new reactors on the horizon to existing requirements. The staff, however, should maintain its focus in completing the current effort to risk-inform specific rules such as §50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors," and §50.61, "Fracture Toughness Requirements for Protection Against Pressurized Thermal Shock Events."

For the policy issues that need to be resolved to develop a licensing strategy for advanced reactors, I acknowledge that there are wide-ranging opinions among the various stakeholders on the issues of integrating safety, security, and emergency preparedness, establishing a minimum level of safety for new plants, integrating risk for a site with multiple reactors, and establishing containment performance standards. I agree with the staff that there is no compelling reason to seek generic resolution of these policy issues at this time since all near-term combined license applications will be for light water reactors and these can be licensed using the existing regulations. For non-light water reactors, the insights that would be gained through the evaluation of the various options being considered in the licensing strategy for the NGNP and the PBMR pre-application review should help reconcile the diverse stakeholder opinions for generically resolving this policy issue.

Lastly, I agree that a Commission policy statement that defines defense-in-depth is needed for future plants. A technology-neutral defense-in-depth statement that recognizes the role of inherent safety and passive approaches, in addition to the traditional use of redundant and

diverse active systems, would be helpful in advance of developing new licensing requirements. Therefore, I approve staff's recommendation to develop a draft policy statement on defense-in-depth for future plants in a timely fashion so that it could be evaluated using the insights gained through the development of the NNGP licensing strategy and completion of the PBMR pre-application review.

The use of the Advanced Notice of Proposed Rulemaking has yielded valuable feedback from the stakeholders in shaping the staff's vision for developing a licensing strategy for future reactors. I strongly support the staff's continued interaction with the ACRS and external stakeholders in this important pioneering work.

 8/9/07
Dale E. Klein Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

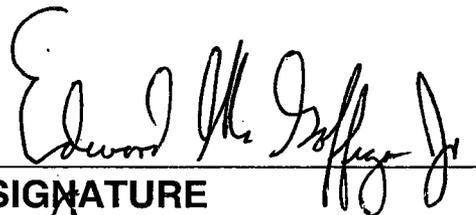
FROM: COMMISSIONER MCGAFFIGAN

SUBJECT: SECY-07-0101 - STAFF RECOMMENDATIONS
REGARDING A RISK-INFORMED AND
PERFORMANCE-BASED REVISION TO 10 CFR PART
50 (RIN 3150-AH81)

Approved Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached None _____



SIGNATURE

August 22, 2007

DATE

NOTATION VOTE
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER JACZKO
SUBJECT: SECY-07-0101 - STAFF RECOMMENDATIONS
REGARDING A RISK-INFORMED AND
PERFORMANCE-BASED REVISION TO 10 CFR PART
50 (RIN 3150-AH81)

Approved X Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached X None _____



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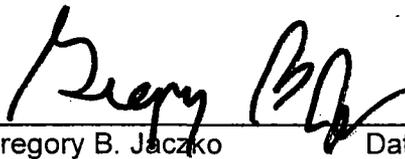
8/13/07

DATE

**Commissioner Jaczko's comments on SECY-07-0101
Staff Recommendations Regarding Risk-informed and Performance-based
revision to 10 CFR Part 50**

I approve the staff recommendation to defer work on the rulemaking for risk-informed and performance-based 10 CFT Part 50 reactor requirements for advanced reactors until after the development of the licensing strategy for the Next Generation Nuclear Plant. As I indicated in my vote disapproving the staff recommendation in SECY-06-0007, the paper from which the Commission decided to issue the advanced notice of proposed rulemaking, the efforts to develop a technology neutral reactor rulemaking would not be the most efficient use of agency resources and would not likely be of use to any of the technologies likely to be used by a utility to seek a license in the near future. As the staff recommends in the current paper, the agency should develop the licensing strategy for a particular technology chosen for the NGNP project and then consider the need for a technology neutral, risk-informed, performance-based rulemaking. I fully support focusing the staff resources in this manner at this time.

I am particularly pleased with the staff and stakeholder comments regarding the importance of developing a policy statement on the defense-in-depth policy separate from the development of technology neutral reactor regulations. I encourage the staff to engage many members of the public, the Congress, the industry and other stakeholders as they prepare this important document.



Gregory B. Jaczko Date 8/13/07

NOTATION VOTE

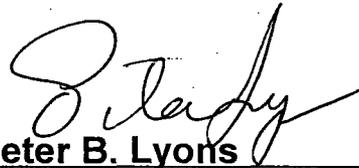
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER LYONS
SUBJECT: SECY-07-0101 - STAFF RECOMMENDATIONS
REGARDING A RISK-INFORMED AND
PERFORMANCE-BASED REVISION TO 10 CFR PART
50 (RIN 3150-AH81)

Approved X Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached X None _____



Peter B. Lyons

SIGNATURE

8/ 17 /07

DATE

Entered on "STARS" Yes X No _____

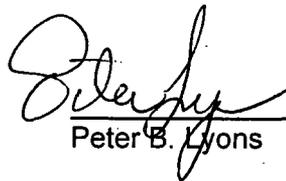
Commissioner Lyons' Comments on SECY-07-0101

**Staff Recommendations Regarding a Risk-Informed and Performance-Based Revision to
10 CFR PART 50**

I approve the staff's recommendation to defer rulemaking for risk-informed and performance-based 10 CFR Part 50 reactor requirements for advanced reactors until after the development of the licensing strategy for the Next Generation Nuclear Plant (NGNP). The staff should provide a recommendation regarding rulemaking to the Commission 6 months after the NGNP licensing strategy is finalized. While this remains a valuable initiative, I agree with the Chairman and the staff that until there is a demonstrable need for conducting rulemaking to support licensing of non-light water advanced reactors, the decision to do so would be premature. This does not alter my commitment to supporting non-light water reactor research activities, which should continue.

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In the interim, the staff should publish the Framework and initiate efforts to develop a policy statement on defense-in-depth.


Peter B. Lyons 8/17/07
Date