

October 29, 2003

COMMISSION VOTING RECORD

DECISION ITEM: SECY-03-0160

TITLE: DENIAL OF PETITION FOR RULEMAKING
 (PRM-50-74) - AMEND APPENDIX K TO 10 CFR
 PART 50 TO PROVIDE A VOLUNTARY
 ALTERNATIVE WHICH WOULD REPLACE THE
 1971 AMERICAN NUCLEAR SOCIETY DECAY
 HEAT STANDARD WITH THE 1994 AMERICAN
 NUCLEAR SOCIETY STANDARD

The Commission (with Chairman Diaz and Commissioner Merrifield agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of October 29, 2003. Commissioner McGaffigan disapproved the subject paper.

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

SECY NOTE: THIS SRM AND SECY PAPER WILL BE RELEASED TO THE PUBLIC 5
 DAYS AFTER THE LETTER IS ISSUED TO THE PETITIONER.

PDR

VOTING SUMMARY - SECY-03-0160

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. DIAZ	X				X	10/14/03
COMR. McGAFFIGAN		X			X	10/3/03
COMR. MERRIFIELD	X				X	10/15/03

COMMENT RESOLUTION

In their vote sheets, Chairman Diaz and Commissioner Merrifield approved the staff's recommendation and provided some additional comments. Commissioner McGaffigan disapproved the staff's recommendation. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on October 29, 2003.

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Commissioner Comments on SECY-03-0160

Chairman Diaz

I approve the decision to deny the petition on the Appendix K decay heat. In March 2003, I voted in favor of approving the petition since, at that time, it appeared to be an expedient means of updating and removing unnecessary conservatism from certain aspects of the 50.46 requirements. However, at this time I believe that denying the petition and encouraging the use of the realistic LOCA alternative, which is already available in the regulations, is a more desirable and practical approach. The realistic LOCA approach provides an integral and systematic approach to addressing 50.46 conservatism, and provides a logical step towards a risk-informed set of LOCA requirements.

I do not support the concerns expressed in the Commission paper relating to “phenomena that are now known to contribute non-conservatism to the Appendix K evaluation models.” I see them as second order effects and I have no doubt that an appropriate level of conservatism in the Appendix K requirements would remain even with a modified requirement in the area of the decay heat curve. Therefore, the basis for the denial needs to be modified to indicate that it is based on the availability of a more desirable alternative, that is, the use of the 50.46 realistic model alternative. As indicated in the Commission paper (SECY-03-0160), the staff should continue to resolve any potential concerns with evaluation model conservatism “independently from the current 10 CFR 50.46 rulemaking efforts.”

Commissioner McGaffigan

I disapprove the staff's proposal to deny the petition for rulemaking (PRM-50-74) submitted by the Nuclear Energy Institute (“Petitioner”) regarding the decay heat standard used in 10 CFR Part 50, Appendix K, “ECCS Evaluation Models.”

As I stated in my comments on SECY-02-0057, I supported the staff's proposal in that SECY to provide a voluntary alternative to Appendix K which would replace the 1971 American Nuclear Society (ANS) decay heat standard with the 1994 ANS standard. There is so much overall conservatism in Appendix K that the fact that there may also be some non-conservatism elsewhere should not prevent this modest change. As I also noted in my previous vote, the NRC modified Appendix K a couple of years ago to take into account the more accurate flowmeter technology available today (which has in turn allowed numerous small power up-rates to go forward). So we have updated Appendix K when it was appropriate to do so. Additionally, the original staff recommendation was supported by the ACRS. The reasoning behind ACRS's support for this small, focused change was well laid out in their letter to the Commission, dated July 25, 2001.

Accordingly, I support the Petitioner's proposal to allow applicants to take credit and improve their calculations based on the newer ANS standard, which reflects more than twenty years of additional data and experience. The staff should revise the Federal Register notice and associated documents consistent with the granting of the petition, and begin the formal

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rulemaking process as requested by the Petitioner.

Commissioner Merrifield

I approve the staff's recommendation to deny the petition for rulemaking associated with the 1994 ANS decay heat standard. Consistent with my comments on SECY-02-0057, I continue to believe that as known conservatism is removed by incorporation of an updated model, one must clearly understand the potential impact on the overall results and account for potential non-conservatism. Absent this understanding, I can not support the piecemeal updating of Appendix K. I continue to support the use of "best-estimate" analysis for reactor coolant system behavior during LOCAs.

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